

#### Consulting Engineers

Block 10-4,	Fa
Blanchardstown Corporate Park,	Fa
Dublin 15, Ireland.	G
Tel: +353 (0)1 8030401/6	Te
Fax: +353 (0)1 8030409/10	Fa

airgreen House, airgreen Road, alway, Ireland, el: +353 (0)91 565211 ax: +353 (0)91 565398 Northpoint House. New Mallow Road. Cork. Ireland. Tel: +353 (0)21 4308624 Fax: +353 (0)21 4308625 Bedford Place, Howleys Quay, Lower Shannon Street, Limerick, Ireland, Tel: +353 (0)61 415757 Fax: +353 (0)61 409378

otheruse

Market Square, Castlebar, Co. Mayo, Ireland. Tel: +353 (0)94 9021401 Fax: +353 (0)94 9021534 2nd Floor, Elgee Building, Market Square, Dundalk, Co. Louth, Ireland, Tel: +353 (0)42 9335107 Fax: +353 (0)42 9331715

www.tohin.ie

Waste Management Licensing, EPA Headquarters Johnstown Castle Johnstown Co Wexford

17<sup>th</sup> June 2008

#### Re: Waste Licence Review Application for the extension and intensification of the Drehid Waste Management Facility, located at Killinagh Upper, Carbury, Co. Kildare

Dear Sir/Madam,

On behalf of our client Bord na Móna, plc, please find attached a Waste Licence Review Application and accompanying Environmental Impact Statement for the extension and intensification of the Drehid Waste Management Facility.

The Waste Licence Review Application, in hardcopy and digital format is provided and the content of the electronic files on the accompanying CD-ROM(s) contain a true copy of the original application.

An Environmental Impact Statement (EIS) in hardcopy and digital format is submitted with this application and the content of the electronic files on the accompanying CD-ROM(s) contain a true copy of the original EIS.

We have also included a cheque from Bord na Móna for €31,000 in respect of the application fee.

Yours sincerely,

reho

Damien Grehan TOBIN Consulting Engineers

 Directors:
 D.A. Downes (Chairman)
 L.E. Waldron (Managing Director)
 M.F. Garrick
 R.F. Tobin
 J. Colleran
 B.J. Downes
 S. Finlay
 P.J. Fogarty

 D. Grehan
 J.P. Kelly
 B.M. Mulligan
 B. Murray
 C. O'Keeffe
 F. Renkema (Dutch)
 E.J. Harrigan (Company Secretary)

Associates: T. Cannon P. Cloonan D. Conneran M. Conroy T. Curran O. Downes B. Gaffney B. Gallagher B. Heaney B. Hutchinson D. Kennedy M. McDonnell C. McGovern E. McPartlin G. Stevenson



Co. Reg. No. 42654 - Registered Office: Fairgreen House, Fairgreen Road, Galway, Ireland.



١

# Waste 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 P.O.Box 5000, Johnstown Castle Estate, County Wexford Telephone: 053-60600 Fax: 053-60699



## Environmental Protection Agency Application for a Waste Licence

WASTE MANAGEMENT ACTS 1996 to 2003

#### CONTENTS

INTRODUCT	ION	3
CHECKLIST		4
PROCEDURE	S	10
SECTION A	NON-TECHNICAL SUMMARY	12
SECTION B	GENERAL	13
SECTION C	GENERAL MANAGEMENT OF THE FACILITY	19
SECTION D	INFRASTRUCTURE & OPERATION	21
SECTION E	EMISSIONS	26
SECTION F	CONTROL & MONITORING	28
SECTION G	RESOURCES USE & ENERGY EFFICIENCY	31
SECTION H	MATERIALS HANDLING	32
SECTION I	EXISTING ENVIRONMENT & IMPACT OF THE FACILITY	36
SECTION J	ACCIDENT PREVENTION & EMERGENCY RESPONSE	38
SECTION K	REMEDIATION, DECOMMISSIONING, RESTORATION AND AFTERCARE	38
SECTION L	STATUTORY REQUIREMENTS	39
SECTION M	DECLARATION	41

ANNEX 1: STANDARD FORMS

Page 2 of 41



#### INTRODUCTION

A valid application must contain the information prescribed in the Waste Management (Licensing) Regulations 2004 (SI No. 395 of 2004). The applicant is <u>strongly</u> advised to read the *Application Guidance Notes* for Waste Licensing, available from the EPA.

The applicant must conform to the format set out in the guidance notes for applications. Each page of the completed application form must be numbered, e.g. *page 5 of 45*, etc. Also duplicated pages from the application form should be uniquely numbered, e.g. page 5(i) of 45, etc. The basic information should for the most part be supplied in the spaces given in application form and any supporting documentation should be supplied as attachments, as specified. Consistent measurement units must be used throughout.

The applicant should note that the application form has been structured so that it requires information to be presented in an order of progressive detail.

When it is found necessary, additional information may be provided on supplementary attachments which should be crearly cross referenced with the relevant sections in the main document.

While all sections in the application form may not be relevant to the activity concerned, the applicant should look carefully through all aspects of the form and provide the required information, in the greatest possible detail.

All maps/drawings/plans must be no larger than A3 size and scaled appropriately such that they are clearly legible. In exceptional circumstances, where A3 is considered inadequate, a larger size may be requested by the Agency.

Information supplied in this application, including supporting documentation will be put on public display and open to inspection by any person. Should the applicant consider information to be confidential, this information should be submitted in a separate enclosure bearing the legend " In the event that this information is deemed not to be held as confidential, it must be returned to ......". In the event that information is considered to be of a confidential nature, then the nature of this information, and the reasons why it is considered confidential (with reference to the " Access to Information on the Environment" Regulations) should be stated in the Application Form, where relevant.

It should be noted that it will not be possible to process or determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard.



#### CHECKLIST

Articles 12 and 13 of the Waste Management (Licensing) Regulations, 2004 (S.I. No. 395 of 2004) set out the information which must, in all cases, accompany a waste licence application. In order to ensure that the application fully complies with the legal requirements of Articles 12 and 13 of the 2004 Regulations, all applicants should **complete** the following.

In each case, refer to the attachment number(s) of your application which contain(s) the information requested in the appropriate sub-article.

Article 12(1) In the case of an application for a waste licence, the application shall -

(a) give the name, address and, where applicable, any telephone number and telefax of the applicant (and, if different, the operator of the facility concerned), the address to which correspondence relating to the application should be sent and, if the applicant or operator is a body corporate, the address of its registered office or principal office,

ىھى

LOCATION	Attachment A	A 🔊	5	
CHECKED	Applicant	AN and	Official	

(b) give the name of the planning authority in whose functional area the relevant activity is or will be carried on,

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official
-		-

(c) in the case of a discharge of any trade effluent or other matter (other than domestic sewage or storm water) to a sewer of a sanitary authority, give the name of the sanitary authority in which the sewer is vested or by which it is controlled,

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official

(d) give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the facility or premises to which the application relates,

LOCATION	Attachment A	Α	
CHECKED	Applicant	$\boxtimes$	Official

(e) describe the nature of the facility or premises concerned, including the proposed capacity of the facility or premises, and in the case of application in respect of a landfill of waste, the requirements specified in Annex 1 of the Landfill Directive,



LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official

(f) specify the class or classes of activity concerned, in accordance with the Third and Fourth Schedules of the Act, and in the case of an application in respect of the landfill of waste, specify the class of landfill in accordance with Article 4 of the Landfill Directive,

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official

(g) specify, by reference to the relevant European Waste Catalogue codes as presented by Commission Decision 2000/532/EC of 3 May 2000, the quantity and nature of the waste or wastes which will be treated, recovered or disposed of,

LOCATION	Attachment	А	2.	
CHECKED	Applicant	$\boxtimes$	Öfficial	
			NY	

(h) specify the raw and ancillary materials, substances, preparations, fuels and energy which will be utilised in or produced by the activity,

LOCATION	Attachment A	
CHECKED	Applicant 🖂	Official

(i) describe the plant, methods, processes, ancillary processes, abatement, recovery and treatment systems and operating procedures for the activity,

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official

(j) provide information for the purpose of enabling the Agency to make a determination in relation to the matters specified in paragraphs (a) to (g) of section 40(4) of the Act,

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official



(k) give particulars of the source, location, nature, composition, quantity, level and rate of emissions arising from the activity and, where relevant, the period or periods during which such emissions are made or are to be made,

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official

(l) give details, and an assessment of the effects, of any existing or proposed emissions on the environment, including any environmental medium other than those into which the emissions are, or are to be made, and of proposed measures to prevent or eliminate or, where that is not practicable, to limit or abate such emissions,

1	LOCATION	Attachment A	A		
	CHECKED	Applicant	$\boxtimes$	Official	

(m) identify monitoring and sampling points and indicate proposed arrangements for the monitoring of emissions and the environmental consequences of any such emissions,

LOCATION	Attachment A any any	
CHECKED	Applicant	Official

(n) describe any proposed arrangements for the prevention, minimisation and receivery of waste arising from the activity concerned,

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official

(o) describe any proposed arrangements for the off-site treatment or disposal of solid or liquid wastes,

LOCATION	Attachment A			
CHECKED	Applicant	$\boxtimes$	Official	

(p) describe the existing or proposed measures, including emergency procedures, to prevent unauthorised or unexpected emissions and minimise the impact on the environment of any such emission,

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official



(q) describe the proposed measures for the closure, restoration, remediation or aftercare of the facility concerned, after the cessation of the activity in question,

LOCATION	Attachment A			
CHECKED	Applicant	$\triangleleft$	Official	

(r) in the case of an application in respect of the landfilling of waste, give particulars of –

(i) such financial provision as is proposed to be made by the applicant, having regard to the provisions of Articles (7)(i) and (8)(a)(iv) of the Landfill Directive and section 53(1) of the Act, and

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official

(ii) such charges as are proposed or made, having regard to the requirements of section 53A of the Act, Section 54A of the Act

LOCATION	Attachment A and and	
CHECKED	Applicant 🔯 🖓	Official
	Pulledine	
	ctionper	

(s) state whether the activity is for the purposes of an establishment to which the European Communities (Control of Major Accident Hazards involving Dangerous Substances) Regulations, 2000 (S.I. No. 476 of 2000) apply,

LOCATION C	Attachment A	
CHECKED	Applicant 🛛	Official

\_cer

(t) in the case of an activity which gives rise or could give rise to an emission into an aquifer containing the List I and II substances specified in the Annex to Council Directive 80/68/EEC of 17 December 1979, describe the existing or proposed arrangements necessary to give effect to Articles 3,4,5,6,7,8,9 and 10 of the aforementioned Council Directive,

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official



(u) include a non-technical summary of information provided in relation to the matters specified in paragraphs (a) to (t) of this sub-article,

LOCATION	Attachment A	
CHECKED	Applicant 🛛	Official

- Article 12(4) Without prejudice to Article 13(1) and (2), an application for a licence shall be accompanied by -
  - (a) a copy of the relevant page of the newspaper(s) in which the notice in accordance with article 6 has been published,

LOCATION	Attachment B6	
CHECKED	Applicant 🛛	Official

(b) a copy of the text of the notice or notices erected or fixed in accordance with article 7,

LOCATION	Attachment	B6		, 1 <sup>50</sup>	
CHECKED	Applicant	$\boxtimes$	othe	Official	
		14.	3		

(c) where appropriate, a copy of the notice given to a local planning under article 9,

LOCATION	Attachment B6	
CHECKED	Applicant 🖂	Official
	A d cor	

(d) a copy of such plans (appropriately scaled and no larger than A3 size), including a site plan or plans and location map or maps, and such other particulars, reports and supporting documentation as are necessary to identify and describe, as appropriate 
(i) the position of the notice in accordance with article 7,

LOCATION	Attachment B6	
CHECKED	Applicant 🛛	Official

(ii) the point or points from which emissions are made or are to be made, and

LOCATION	Attachment E			
CHECKED	Applicant	$\triangleleft$	Official	



(iii) the point or points at which monitoring and sampling are undertaken or are to be undertaken,

LOCATION	Attachment F	
CHECKED	Applicant 🛛	Official

(e) such fee as is appropriate having regard to the provisions of articles 40 and 41.

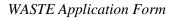
INCLUDED Y/N	Y		
CHECKED	Applicant	$\boxtimes$	Official

Article 12(5)(a) & (b) An application shall comprise 1 signed original of the application and 2 copies in hardcopy format plus 2 copies of all files in electronic searchable PDF format on CD-Rom.

HARDCOPIES PROVIDED Y/N	Y	15 <sup>6</sup> .
CHECKED	Applicant	Official
	al a	y any
CD OF PDF FILES PROVIDED? Y/N	Y costiled f	o <sup>t</sup>
CHECKED	Applicant	Official
	Spectic wheet	

Article 13 Where a development requires an Environmental Impact Assessment to be carried out, 1 signed original and 2 copies in hardcopy format of the environmental impact statement plus 16 copies in electronic searchable PDF format on CD-ROM should accompany this application.

EIA REQUIRED ? Y/N	Y			
CHECKED	Applicant	$\boxtimes$	Official	
3 HARD COPIES OF EIS INCLUDED ? Y/N	Y			
CHECKED	Applicant	$\boxtimes$	Official	
16 CD versions of EIS, as PDF files, PROVIDED? Y/N	Y			
CHECKED	Applicant	$\boxtimes$	Official	





#### PROCEDURES

#### It is recommended that pre-application consultations with the Agency are undertaken before a formal submission of the waste licence application.

The procedure for making and processing of applications for waste licences, and for the processing of reviews of such licences, appear in the Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004) and are summarised below. The application fees that shall accompany an application are listed in the Second Schedule to the Regulations.

Prior to submitting an application the applicant must publish in a local newspaper, and erect on site, a notice of intention to apply. An applicant, other than a local authority in whose functional area the development is located, must also notify the Local Planning Authority, in writing, of their intention to apply.

An application for a licence must be submitted on the appropriate form (available from the Agency) with the correct fee, and should contain relevant supporting documentation as attachments. The application should be based on responses to the form, supporting written text and the appropriate use of tables and drawings. Where point source emissions occur, a system of unique reference numbers should be used to denote each emission point. These should be simple, logical, and traceable throughout the application.

The application form is divided into a number of sections of related information. The purpose of these divisions being to facilitate both the applicant and the Agency in the provision of the information and its assessment. Attachments should be clearly numbered, titled and paginated and must contain the required information as set out in the application form. Additional attachments may be included to supply any further information supporting the application. Any references made should be supported by a bibliography.

All questions should be answered. No waste management facility is exactly the same and hence each application will require different information. It is therefore possible that some of the sections of this application form may not be relevant to the activity concerned. Where information is requested in the application form, which is not relevant to the application, the words "not applicable" should be clearly written on the form. The abbreviation "N/A" should not be used.

Additional information may need to be submitted beyond that which is explicitly requested on this form. Any references made should be supported by a bibliography. The Agency may request further information if it considers that its provision is material to the assessment of the application. Advice should be sought from the Agency where there is doubt about the type of information required or the level of detail.

Information supplied in this application, including supporting documentation will be put on public display and be open to inspection by any person. **Should the applicant** 



consider information to be confidential, then the nature of this information, and the reasons why it is considered confidential should be clearly stated in an attachment to the Application Form. This information should be submitted in a separate enclosure bearing the legend "In the event that this information is deemed not to be held as confidential, it must be returned to (representative of the applicant)".

Applicants should be aware that a contravention of the conditions of a waste licence is an offence under Section 39 of the Waste Management Acts 1996 to 2003.

The provision of information in an application for a waste licence which is false or misleading is an offence under Section 45 of the Waste Management Acts 1996 to 2003.

*Note:* <u>*Drawings*</u>. *The following guidelines are included to assist applicants:* 

- All drawings submitted should be titled and dated.
- They should have a <u>unique reference number</u> and should be signed by a clearly identifiable person.
- They should indicate a scale and the <u>direction of north</u> of the state of the sta
- All drawings should, generally, be to a scale of between 1:20 to 1:500, depending upon the degree of detail needed to be shown and the size of the facility. Drawings delineating the boundary can be to a smaller scale of between 1:1000 to 1:10560, but must clearly and accurately present the required level of detail. Drawings showing the site location can be to a scale of between 1:50 000 to 1:126 720. All drawings should, however, be A3 or less and of an appropriate scale such that they are clearly legible. Provide legends on all drawings and maps as appropriate.

The provision of information in an application for a waste licence, which is false or misleading, is an offence under s45 of the Acts.



#### SECTION A NON-TECHNICAL SUMMARY

A Non-Technical Summary is to be submitted. The summary should include information on those aspects outlined in the Guidance Note and must comply with the requirements of Article 12 (1) (u) of the Waste Management (Licensing) Regulations, S.I. 395 of 2004.

The Non-Technical Summary should form Attachment A.1.

Consent of copyright owner convict for any other use.

#### SECTION B GENERAL

B.1 Applic	cant's Details
Name*:	Bord na Móna Plc.
Address: C/o John Connolly, Bord na Móna,	
	Leabeg,
	Tullamore,
	Co. Offaly.
Tel:	057-934 5954
Fax:	057-934 5179
e-mail:	john.connolly@bnm.ie

\* This should be the name of the applicant which is current on the date this Waste Licence Application is lodged with the Agency. It should be the name of the legal entity (which can be a limited company or a sole trader). A trading/business name is not acceptable.

#### Name and Address for Correspondence

Only application documentation submitted by the applicant and by the nominated person will be deemed to have come from the applicant.

Name:	Damien Grehan, Tobin Consulting Engineers and and
Address:	Block 10-4,
	Blanchardstown Corporate Park,
	Dublin 15, joint to
	Ireland
Tel:	01 8030 401 contriger
Fax:	01 8030 410
e-mail:	damien.grehan@tobin.ie

Address of registered or principal office of Body Corporate (if applicable)

Address:	Main Street,
	Newbridge,
	Co. Kildare
Tel:	045 439 000
Fax:	045 439 001
e-mail:	Not Applicable

If the applicant is a body corporate, the following information must be attached as **Attachment B1**:

a) a Certified Copy of the Certificate of Incorporation or Memorandum and Article of Association;

b) the Company's Registration Number from the Companies Registry Office; and

c) a list of the Company Directors.



State the interest of the applicant in the land which is subject to the application. The applicant is (please check):

Landowner	$\square$
Lessee	
<b>Prospective Purchaser</b>	
Other (please specify)	

Name and address of all occupiers of the land on which the Activity is situated (if different from applicant named above).

Name:	Not Applicable	
Address:		
Tel:		
Tel: Fax: e-mail:		
e-mail:		 

Name and address of the current<sup>\*</sup> owner(s) and lessees of the land, buildings and ancillary plant on which the activity is or will be situated (if different from applicant named above). An appropriately scaled drawing( $\leq 43$ ) showing the above details should be included in Attachment B1.

Name:	Not Applicable	dion per rea	
Address:		. AS A CAL	
		For still	
		S CON	
		optio	
Tel:		CONS	
Fax:		~~	

#### e-mail:

\*Current at the time the application is submitted

#### **B.2** Location of Activity

Name:	Killinagh Upper, Carbury, Co. Kildare	
Address*:	: In the townlands of Parsonstown, Loughnacush, Kilkeaskin, Timahoe West,	
	Drummond, Coolcarrigan, Killinagh Lower and Killinagh Upper	
Tel:	1800 373 443	
Fax:		
e-mail:		
<b>чт</b> 1 1	. 1 1	

\* Include any townland

~ epa\_

WASTE	Applicatio	on Form
WADIL	$\alpha p p m u m$	m r $0$ m

	- FI
National Grid Reference	(E2744, N2315– note this
(8 digit 4E,4N)	is the centre of the site
	located at the admin
	building)

Location maps ( $\leq$ A3), appropriately scaled, with legible grid references should be enclosed in **Attachment B.2.** The site boundary must be outlined on the map in colour.

#### **B.3** Planning Authority

Give the name of the planning authority in whose functional area the activity is or will be carried out.

Name:	Kildare County Council*	
Address:	Head Office, Áras Chill Dara,	
	Devoy Park, Naas, Co Kildare	
Tel:	(045) 980200	
Fax:	(045) 980240	

\*A Planning Application has been submitted to An Bord Pléanala under the Planning and Development (Strategic Infrastructure) Act 2006, however the subject site is located within functional area of Kildare County Council.

Has the Planning Authority received written notification from the applicant of the application to The Environmental Protection Agency for a Waste Licence under Article 9 of the Waste Management (Licensing) Regulations?

Planning Authority notified	Yes 🖂
rins an o	No 🗌
$\wedge 0^{\circ} \cdot 0^{\circ}$	

Letters of notification has been sent to Kildare County Council and An Bord Pléanala.

Planning Permission relating to this application:-

has been obtained	
is being processed	$\square$
is not yet applied for	
is not required	

Local Authority Planning	09.PA0004
File Reference N <sup>o</sup> :	

Attachment B.3 should contain *the most recent* planning permission, including a copy of *all* conditions, and the required copies of any EIS should also be enclosed. For existing activities, Attachment B.3 should also contain copies of of the most recent waste licence and any permits in force at the time of submission. Where planning permission is not required for the development, provide reasons, relevant correspondence, *etc*.



#### **B.4** Sanitary Authority

In the case of a discharge of any trade effluent or other matter (other than domestic sewage or storm water) to a sewer of a sanitary authority or other body, give the name of the sanitary authority in which the sewer is vested or by which it is controlled and the waste water treatment plant (if any) to which the sewer discharges.

Name:	Kildare County Council – Leixlip Wastewater Treatment Plant		
Address:	Head Office,		
	Áras Chill Dara,		
	Devoy Park,		
	Naas, Co Kildare		
Tel:	(045) 980200		
Fax:	(045) 980240		

The applicant must enclose, as Attachment B.4, a copy of any effluent discharge licence and/or agreement between the applicant and the body with responsibility for the sewer.

#### **B.5** Other Authorities

The applicant should tick the appropriate box below to identify whether the activity is located within the Shannon Free Airport Development Company (SFADCo.) area.

Within SFADCo. Area	Yes	No 🖂
---------------------	-----	------

 Within SFADCo. Area
 Yes
 No
 No

 The applicant should indicate the Health Board Region where the activity is or will be located.

100 0th

Name:	Health Service Ex	cecutive-Dublin-Mid Leinster
Address:	Clonminch,	E BR
	Tullamore,	A D
	Co. Offaly	- Met
Tel:	057 935 7600	
Fax:	057 935 7660	

#### **B.6** Notices and Advertisements

Articles 6 and 7 of the Waste Management (Licensing) Regulations 2004 requires all applicants to advertise the application in a newspaper and by way of a site notice. See *Guidance Note*.

Attachment B.6 should contain a copy of the site notice and an appropriately scaled drawing ( $\leq A3$ ) showing its location on site. The original application must include the complete newspaper in which the advertisement was placed. The relevant page of the newspaper containing the advertisement should be included with the original and three copies of the application.

#### B.7 Type of Waste Activity, Tonnages & Fees

**B.7.1** Specify the class or classes of activity in Table B.7.1, in accordance with the Third Schedule or Fourth Schedule to the Waste Management Acts 1996 to 2003, to which the application relates (check the relevant box(es) and mark the principal activity with a 'P').

Attachment B.7 should identify the principle activity and include a brief technical description of each of the other activities specified. There can only be one principal activity.

## TABLE B.7.1 THIRD AND FOURTH SCHEDULES OF THE WASTE MANAGEMENTACTS 1996 TO 2003

Waste Management Acts 1996 to 2003					
THIRD SCHEDULE Waste Disposal Activities	Y/N	FOURTH SCHEDULE	Y/N		
1. Deposit on, in or under land (including landfill).	Х	1. Solvent reclamation or regeneration.			
<ol> <li>Land treatment, including biodegradation of liquid or sludge discards in soils.</li> </ol>		2. Recycling or reclamation of organic substances which are net used as solvents (including composting and other biological processes).	Х		
<ol> <li>Deep injection of the soil, including injection of pumpable discards into wells, salt domes or naturally occurring repositories.</li> </ol>	Purpos	Recycling or reclamation of metals and metal compounds.			
<ol> <li>Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.</li> </ol>	Ň	4. Recycling or reclamation of other inorganic materials.			
5. Specially engineered landfill, including placement intervined discrete cells which are capped and isolated from one another and the environment.	Р	5. Regeneration of acids or bases.			
6. Biological treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 5 or paragraphs 7 to 10 of this Schedule.	X	6. Recovery of components used for pollution abatement.			
7. Physico-chemical treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 5 or paragraphs 8 to 10 of this Schedule (including evaporation, drying and calcination).		7. Recovery of components from catalysts.			
8. Incineration on land or at sea.		8. Oil re-refining or other re-uses of oil.			
9. Permanent storage, including emplacement of containers in a mine.		<ol> <li>Use of any waste principally as a fuel or other means to generate energy.</li> </ol>			
10. Release of waste into a water body (including a seabed insertion).		10. The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.			
11. Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.		11. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.	Х		
12. Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.		12. Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.			
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.	X	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.	Х		



#### **TABLE B.7.2 MAXIMUM ANNUAL TONNAGE**

The maximum annual tonnage of waste to be handled at the site should be indicated and the year to which the quantity relates indicated.

Maximum Annual Tonnage (tpa)	385,000
Year	2009-2014

#### **B.7.3 FEES**

State each class of activity for which a fee is being submitted as per Part I of the Second Schedule of the Waste Management (Licensing) Regulations 2004, S.I. No. 395 of 2004. Note: two fees are required if disposal and recovery are to occur.

Waste Activity	Fee (in €)
Disposal of Waste (appropriate	€25,000*
disposal activity $1.1 - 3.3$ )	
Recovery of Waste (4)	€6,000*
Total	€31,000 pt

TABLE B.7.4 (FOR A LANDFILL APPLICATION) STATE WHICH OF THE FOLLOWING ISRELEVANT TO THE CURRENT APPLICATION.

FOLVILE

(a) landfill for hazardous waste	
(b) landfill for nor hazardous waste	$\boxtimes$
(c) landfill for mert waste	

#### **B.8 SEVESO II DIRECTIVE**

State whether the activity is for the purposes of an establishment to which the European Communities (Control of Major Accident Hazards involving Dangerous substances) Regulations, 2000 (S.I. No. 476 of 2000), apply.

	<b>Regulations Apply</b>	Yes	No 🖂
--	--------------------------	-----	------

If yes, Attachment B.8 should include the relevant details. Supporting information, as well as copies of any Hazardous Operation Studies (HAZOP) carried out for the site, should also be included in the attachment.



#### SECTION C MANAGEMENT OF THE FACILITY

Advice on completing this section is provided in the Guidance Note.

#### C.1 Technical Competence and Site Management

This information should form Attachment C 1.

Details of the applicant's experience and qualifications, along with that of other relevant employees, should be summarised as shown below. Statements of duties, responsibilities, experience and qualifications should be submitted for each position named below. Additional information, including the management structure and an organisational chart, should be included in **Attachment C 1. Awaiting Info from Garrett Leech** 

Name	Position	Duties and Responsibilities	Experience /Qualifications
Hubert Henry	Acting Director, Bord na Móna, Environmental	Direct Responsibility for Service Overseeing Drehid Waste Management facility	BSc Environmental Science, PhD Science
Garrett Leech	Technical and Commercial Manager, Bord na Móna Environmental	Overseeing of Landfill operations and commercial operations at Drehid Waste Management Facility	BSc Geology, MSc, Environmental Resource Management
Ciaran Geoghegan	Landfill Manager	Managing the operations of Drehid Waste Management facility	4 yrs + of Landfill construction and operations NCEA Cert in Environmental Engineering FAS Waste Management Training Programme
John Nolan	Weighbridge Clerk/ Environmental Officer	Monitoring the waste into the site as well as ensuring that Regulations are adhered too.	3 yrs + in the waste and Quarrying industry as well as 20 yrs in a No. of regulated industries.
Liam Maguire	Site Operations Foreman	To insure that the site operates within Planning Health and Safety and Licence	Previously working in regulated industries Recently in the construction industry and also in the computer industry.
Stephanie Golding	Administration	To insure the EMS is maintained to a high standard and insure correct document control	Working in the waste industry as an Administrator.

Page 19 of 41



#### C.2 Environmental Management System

Attachment C 2 should contain the Environmental Management System (EMS) details required.

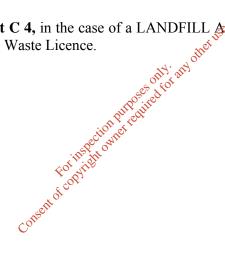
#### C.3 Hours of Operation

Attachment C 3 should contain details of hours of operation for the waste facility, civic waste facilities and other facilities.

- (a) Proposed hours of operation.
- (b) Proposed hours of waste acceptance/handling.
- (c) Proposed hours of any construction and development works at the facility and timeframes (required for landfill facilities).
- (d) Any other relevant hours of operation expected.

#### C.4 Conditioning Plan

Address as Attachment C 4, in the case of a LANDFILL Application, and only for the review of a Landfill Waste Licence.





#### SECTION D INFRASTRUCTURE & OPERATION

#### **D.1** Infrastructure

Complete the following table detailing the site infrastructure. **Attachment D 1** should contain the appropriate documentation. Information provided should follow the sequence, and use the headings, established in Table D.1. Additional advice on completing this section is provided in the application *Guidance Note*.

Table	D.1. Infrastructure	y/n	Comments
D.1.a	Site security arrangements including gates and fencing	у	Refer to Section 3.3.1, Volume II of the EIS
D.1.b	Designs for site roads	у	Refer to Section 3.3.2, Volume II of the EIS
D.1.c	Design of hardstanding areas	у	Refer to Section 3.3.3, Volume II of the EIS
D.1.d	Plant	y use.	Refer to Section 3.3.13, Volume II of the EIS
D.1.e	Wheel-wash Unpost of the second secon	у	Refer to Section 3.3.5, Volume II of the EIS
D.1.f	Laboratory facilities	у	Refer to Section 3.3.6, Volume II of the EIS.
D.1.g	Design and location of fuel storage areas	у	Refer to Section 3.3.7, Volume II of the EIS.
D.1.h	Waste quarantine areas	у	Refer to Section 3.3.8, Volume II of the EIS.
D.1.i	Waste inspection areas	у	Refer to Section 3.3.9, Volume II of the EIS.
D.1.j	Traffic control	у	Refer to Section 3.3.10, Volume II of the EIS.
D.1.k	Sewerage and surface water drainage infrastructure	у	Refer to Section 3.3.11, Volume II of the EIS.
D.1.1	All other services	у	Refer to Section 3.3.12, Volume II of the EIS.
D.1.m	Plant sheds, garages and equipment compound	у	Refer to Section 3.3.13, Volume II of the EIS.
D.1.n	Site accommodation	у	Refer to Section 3.3.14, Volume II of the EIS.
D.1.0	A fire control system, including water supply	у	Refer to Section 3.3.15, Volume II of the EIS.
D.1.p	Civic amenity facilities	n	Not proposed for site
D.1.q	Any other waste recovery infrastructure	n	Not proposed for site
D.1.r	Composting infrastructure	у	Refer to Section 3.3.17



			Volume II of the EIS.and Appendix 3.3.2 Volume IV of the EIS.
D.1.s	Construction and Demolition waste infrastructure	n	Not proposed for site
D.1.t	Incineration infrastructure (if applicable). Provide information to fulfil Article 4 (2) & (3) of the Incineration of Waste Directive	n	Not proposed for site
D.1.u	Any other infrastructure	n	Not proposed for site

#### **D**.2 **Facility Operation**

In Attachment D 2 describe the plant, methods, processes and operations of the waste facility, as required by the Guidance Note.

Attachment included	yes 🖂	no	not applicable
			Ø.•

#### LANDFILLS

ouly any other use The following Sections D3 to D7 should only be completed for Landfill Applications. Reference should be made to the Agency landfill manual 'Landfill Site Design (2000)' when completing this section. Forinspec

**D.3 Liner System** For inspection of the following table or egarding the liner system to be used for the landfill/landfill extension and detail the information requested as Attachment D.3. Items D3c to D3g should only be completed for immediate projects only (ie Years 1 & 2). A schedule of Liner construction activities for the medium to long term need only be listed in item D3a below, since Condition 3 of any licences granted will provide reporting requirements for any future projects.

#### TABLE D.3 LINER SYSTEM

		y/n	Comments
<b>D.3.a</b>	Provide information to fulfil Annex 1 of the	у	Refer to Attachment D 3a
	Landfill Directive		
<b>D.3.</b> b	What type of liner system is specified?	у	Refer to Attachment D 3b
<b>D.3.</b> c	Has a Quality Control Plan been specified?	у	Refer to Attachment D 3c
<b>D.3.d</b>	Has a Quality Assurance Plan been specified?	у	Refer to Attachment D 3d
<b>D.3.e</b>	Have independent, third-party supervision,	у	Refer to Attachment D 3e
	testing and controls been specified?		
<b>D.3.f</b>	Have basal gradients for all cells and access	у	Refer to Attachment D 3f
	ramps to the cells been designed?		
<b>D.3.</b> g	Has a leak detection survey been specified?	у	Refer to Attachment D 3g



#### D.4 Leachate Management

Complete the following table detailing leachate management arrangements. Further information should be included in **Attachment D.4.** 

#### TABLE D.4.1 LEACHATE MANAGEMENT ARRANGEMENTS

		y/n	Comments
		У	Refer to Attachment D
<b>D.4.a</b>	Is there a Leachate Management Plan?		4a
		у	Refer to Attachment D
<b>D.4.</b> b	Have annual quantities of leachate been calculated?		4b
		у	Refer to Attachment D
<b>D.4.</b> c	Has the total quantity of leachate been calculated?		4c
		у	Refer to Attachment D
<b>D.4.d</b>	Have the size of the cells been specified taking		4d
	account of the water balance calculations?		
	13. 213°	у	Refer to Attachment D
<b>D.4.</b> e	Has a leachate collection system been specified?		4e
	attostitec	у	Refer to Attachment D
<b>D.4.</b> f	Has a leachate storage system been specified?		4f
	OPECTANIE	У	Refer to Attachment D
<b>D.4.</b> g	Has a system for monitoring the level of leachate in		4g
	the waste been designed?		
	L'OLO	У	Refer to Attachment D
<b>D.4.</b> h	Is leachate recirculation proposed/practised?		4h
	Cox	n	Treatment is off-site
<b>D.4.i</b>	Has leachate treatment on-site been specified?		
		у	Refer to Attachment D
D.4.j	Has leachate removal been specified?		4j

#### **D** 5 Landfill Gas Management

All landfill sites should have suitable arrangements for the management of landfill gas. Attachment D.5 should contain the appropriate documentation. Information provided should follow the sequence, and use the headings, established in Table D.5. *Items D5g to D5m should only be completed <u>for immediate or current gas</u> <u>collection projects only</u> (ie Years 1 & 2). A schedule of gas management aspects for the medium to long term need only be listed in item D5f below, since Condition 3 of any proposed decision/licence will provide reporting requirements for any future projects.* 



## Table D.5. Landfill Gas Management

	S. Lanumi Gas Management	y/n	Comments
D.5a	Is there a Landfill Gas Management Plan?	У	Refer to Attachment D 5a
	Provide estimates of the volumes of landfill gas which will be produced by the waste disposed of in the site for the next 20 years, and compare to the EPER list for methane:		
D.5b	Is there a passive venting system?	У	Refer to Attachment D 5b
D.5c	Does the passive system cover all of the filled area?	У	Refer to Attachment D 5c
D.5d	Have gas alarm systems been installed in the site buildings?	у	Refer to Attachment D 5d
D.5e		y my other	Refer to Attachment D 5e
D.5f	Has a time-scale been proposed for the installation of landfill gas infraction of landfill gas	у	Refer to Attachment D 5f
D.5g	Is gas flaring undertaken at the site?	У	Not Yet Installed Refer to Attachment D 5g
D.5h	Is there an active (i.e., pumped) landfill gas extraction system?	У	Not Yet Installed Refer to Attachment D 5h
D.5i	Does the active system cover all of the filled area?	у	Refer to Attachment D 5h
D.5j	Is landfill gas used to generate energy at the site?	у	Refer to Attachment D 5j
D.5k	Have emissions from the flarestack and utilisation plant been assessed for source, composition, quantity and level and rate?	n	Not as Yet
D.51	Has a maintenance programme for the control system been specified?	у	Refer to Attachment D 51
D.5m	Has a condensate removal system been designed?	у	Refer to Attachment D 5m



#### D.6 Capping System

Complete the following table detailing the design of the capping system. Attachment D.6 should contain the appropriate documentation. *Items D6e to D6k should be completed <u>for immediate projects only</u> (ie Years 1 & 2). Condition 10 of any proposed decision/licence will provide reporting requirements for capping requirements beyond this timeframe.* 

#### Table D.6 Capping System

		y/n	Comments
		у	Refer to Attachment D
<b>D.6</b> a	Has the daily cover been specified?	-	6a
		у	Refer to Attachment D
<b>D.6</b> b	Has the intermediate cover been specified?		6b
		у	Refer to Attachment D
<b>D.6c</b>	Has the temporary capping been specified?		6c
		y use.	Refer to Attachment D
<b>D.6d</b>	Has the Capping System been designed and	her	6d
1	does it meet the requirements of the Landfill		
	Directive Annex 1 (3.3)?		
	- IIPO III CL	у	Refer to Attachment D
<b>D.6</b> e	Does the Capping System include a flexible membrane liner?		6e
	insont o	у	Refer to Attachment D
<b>D.6f</b>	Have all capping materials been specified?		6f
	St. COV	у	Refer to Attachment D
<b>D.6</b> g	Has a Method Statement for construction been produced?		6g
		у	Refer to Attachment D
D.6h	Has a Quality Control Plan been produced?		6h
		у	Refer to Attachment D
D.6i	Has a Quality Assurance Plan been produced?		6i
		у	Refer to Attachment D
D.6j	Has a programme for monitoring landfill stability been developed?		6j
		у	Refer to Attachment D
D.6k	Has a programme for monitoring landfill settlement been developed?		6k



δρα

#### **SECTION E EMISSIONS**

Give particulars of the source, location, nature, composition, quantity, level and rate of emissions arising from the activity and, where relevant, the period or periods during which such emissions are made or are to be made.

The applicant should address in particular any emission point where the substances listed in the Schedule of S.I. 394 of 2004 are emitted.

#### E.1 Emissions to Atmosphere

Details of all point emissions to atmosphere should be supplied. Table E.1.(i) (for Landfill Gas Flare emissions) must be completed for all landfills with a flare. Complete Table E.1(ii) and E.1(iii) for <u>all</u> other main emission points, including stack sources (incinerator stacks, landfill gas utilisation plants, air handling unit emissions etc.). Complete Table E.1(iv) for minor/fugitive/ground emission points.

#### E.2 Emissions to Surface Waters

Attachment E.2 Tables E.2(i) and E.2(ii) should be completed where relevant.

#### E.3 Emissions to Sewer

Attachment E.3 Tables E.3(i) and E.3(ii) should be completed, where relevant.

#### E.4 Emissions to Groundwater

Describe the existing or proposed arrangements necessary to give effect to Articles 3,4,5,6, and 7 of Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against pollution by certain dangerous substances.

Table E.4(i) should be completed, as relevant, for each source.

Supporting information should form Attachment E.4

CP

#### E.5 Noise Emissions

Give particulars of the source, location, nature, level, and the period or periods during which the noise emissions are made or are to be made.

Table E.5(i) should be completed, as relevant, for each source.

Supporting information should form Attachment E.5



#### E.6 Environmental Nuisances

**Attachment E.6** should contain the appropriate documentation. Information provided should follow the sequence, and use the headings as relevant established in Table D.6. Additional advice on completing this section is provided in the *Guidance Note*.

#### TABLE E.6 ENVIRONMENTAL NUISANCES

Bird Control	Control method specified	yes 🖂	no	not applicable
	Attachment included	yes 🖂	no	not applicable
Dust Control	Control method specified	yes 🖂	no	not applicable
	Attachment included	yes 🖂	no	not applicable
Fire Control	Control method specified	yes 🖂	no	not applicable
	Attachment included	yes 🖂	no	not applicable
Litter Control	Control method specified	yes 🖂	no	not applicable
	Attachment included	yes Some	no	not applicable
Traffic Control	Control method specified	ses diff	no	not applicable
	Attachment included	d <sup>ull</sup> yes 🖂	no	not applicable
Vermin Control	Control method citornet	yes 🖂	no	not applicable
	Attachment included	yes 🖂	no	not applicable
Road Cleansing	Control method specified	yes 🖂	no	not applicable
	Attachment included	yes 🖂	no	not applicable



#### **SECTION F CONTROL & MONITORING**

#### F.1: Treatment, Abatement and Control Systems

Describe the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the installation/facility. Details of treatment/abatement systems (air and effluent emissions) should be included, together with appropriately scaled schematics ( $\leq A3$ ) as appropriate.

For each Emission Point identified complete Table F.1 of the Annex, and include detailed descriptions and appropriately scaled schematics ( $\leq A3$ ) of all abatement systems.

Attachment F.1 should contain any supporting information.

#### F.2- F. 9. Monitoring and Sampling Points

Programmes for environmental monitoring should be submitted as part of the application. These programmes should be provided as Astachments F.2 to F.6 and meet the advice published by the Agency in the relevant BAT Note. For Landfills the additional Attachments F.7 to F.8 should be completed. Furthermore for a landfill application the applicant must refer to the Agency Landfill Monitoring Manual (2003) for further details on monitoring requirements for proposed facilities.

Include details of monitoring/sampling locations and methods. ofcopyti

F.2 Air

#### - to include Dust, Odour

Monitoring Arrangements specified	yes 🖂	no	not applicable
Monitoring points identified, (plus	yes 🖂	no	not applicable
12-figure grid references)			
Attachment included	yes 🖂	no	not applicable

#### F.3 Surface Water

Monitoring of surface water shall be carried out at not less than two points, one upstream from the waste facility and one downstream.

Monitoring Arrangements specified	yes 🖂	no	not applicable
Monitoring points identified, (plus	yes 🖂	no	not applicable
12-figure grid references)			
Attachment included	yes 🖂	no	not applicable



#### F.4 Sewer Discharge

Monitoring of sewer discharge shall be carried out at the point specified by the local authority/Agency.

Monitoring Arrangements specified	yes	no	not applicable🛛
Monitoring points identified, (plus	yes 🗌	no	not applicable🖂
12-figure grid references)			
Attachment included	yes 🗌	no	not applicable🖂

#### F.5 Groundwater

Groundwater monitoring is required at all landfill facilities; and certain other waste facilities depending on waste activities and the underlying aquifer vulnerability.

Monitoring Arrangements specified	yes 🖂	no	not applicable
Monitoring points identified, (plus	yes 🖂	no	not applicable
12-figure grid references)			
Attachment included	yes 🖂	no	not applicable

#### F.6 Noise

F.6 Noise		Wolher use.	
Monitoring Arrangements specified	yes and	no	not applicable
Monitoring points identified, (plus 12-figure grid references)	yes del	no	not applicable
Attachment included	ves 🖂	no	not applicable
F.7 Meteorological Data			not oppliegble

#### F.7 Meteorological Data

Monitoring Arrangements specified	yes 🖂	no	not applicable
Monitoring points identified, (plus	yes 🖂	no	not applicable
12-figure grid references)			
Attachment included	yes 🖂	no	not applicable

Application for Landfills require the additional Attachments F.7 to F.8, to be completed:

#### F.8 Leachate

Monitoring Arrangements specified	yes 🖂	no	not applicable
Monitoring points identified, (plus	yes 🖂	no	not applicable
12-figure grid references)			
Attachment included	yes 🖂	no	not applicable



### F.9 Landfill Gas

Complete each of the following tables to show whether information has been included on aspects of landfill gas monitoring. Attachment F.9 should also contain information to show whether the data given in Tables F.9.(a) and F.9(b) below represents actual or anticipated data. Complete Table F.9 as follows:

Table F.9 (a) Landfill Gas Monitoring for existing landfill gas flares / utilis	sation
plants	

Parameter	Concentration (mg/Nm <sup>3</sup> )	Proposed Frequency of Analysis	Information Included Y/N	Method of Analysis	Information Included Y/N
Inlet		~			
Methane (CH <sub>4</sub> ) % v/v					
Carbon dioxide (CO <sub>2</sub> ) %v/v					
Oxygen (O <sub>2</sub> ) % v/v					
Outlet					
Volumetric Flow Rate					
SO <sub>2</sub>					
Nox					
CO					
Particulates					
TA Luft Class I, II, III organics					
Hydrochloric acid			se <sup>o</sup> .		
Hydrogen Fluoride			d'		

#### Table F.9(b) Landfill Gas Monitoring

Hydrogen Fluoride			et.		
Table F.9(b) Landfill	Gas Monitorii	ıg "	only, any other		
Parameter	Proposed F of Analysis	our our	Information Included Y/N	Method of Analysis	f Information Included Y/N
	Gas boreholes / vents/ wells/ perimeter locations	Facility Office			
Methane (CH <sub>4</sub> ) % v/v	Monthly 😵	Continuous	Ν		
Carbon Dioxide (CO <sub>2</sub> ) % v/v	Monthly &	Continuous	N		
Oxygen (O <sub>2</sub> ) % v/v	Monthlyn	Continuous	N		
Atmospheric Pressure	Monthly	Continuous	N		
Temperature	Monthly	Continuous	Ν		

#### Table F.9 (c) Landfill Gas Infrastructure

Equipment	Monitoring Frequency	Information Included Y/N	Monitoring Action	Information Included Y/N
Gas Collection System				
Gas Control System				

Monitoring Arrangements specified	yes 🖂	no	not applicable
Monitoring points identified, (plus	yes 🖂	no	not applicable
12-figure grid references)			
Attachment included	yes 🖂	no	not applicable



#### SECTION G RESOURCES USE & ENERGY EFFICIENCY

#### G.1 Raw Materials, Substances, Preparations and Energy

Attachment G.1 should contain a list of all raw, product and ancillary materials, substances, preparations, fuels and energy which will be utilised in or produced by the activity. Information on any insecticides, herbicides or rat poisons etc. should also be provided with their respective data and safety sheets. The Standard Forms, provided in Annex 1, should be used in the description of these materials, substances, etc., where relevant. Additional advice on completing this section is provided in the *Guidance Note*.

Attachment	yes 🖂	no	not applicable
included			

#### G.2 Energy Efficiency

A description of the energy used in or generated by the activity must be provided in **Attachment G.2**.

	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Attachment included	yes require no	not applicable
	AT INSPECT OWNER	
	FO MIL	
	Consent	



#### SECTION H MATERIALS HANDLING

#### H.1 Waste Types and Quantities – Existing & Proposed

Provide an estimation of the quantity of waste likely to be handled in relation to each class of activity applied for. This information should be included in Table H.1(a).

TABLE H.1(A). QUANTITIES OF WASTE IN RELATION TO EACH CLASS OFACTIVITY APPLIED FOR

Waste Management Act		Waste Management Act		
3rd Schedule (Disposal) Activities		4th Schedule (Recovery) Activities		
Class of	Quantity (tpa)	Class of	Quantity (tpa)	
Activity		Activity		
Applied For		Applied For		
Class 1	As Class 5	Class 1		
Class 2		Class 2	25,000 (Included in Table H.1 (B)	
Class 3		Class 3	115 <sup>0</sup> .	
Class 4	Note 1	Class 4	net	
Class 5	See Table H.1 (B)	Class 5 🚕.		
Class 6	Note 2	Class 61 A		
Class 7		Class 70		
Class 8		Stass 8		
Class 9		Class 9		
Class 10		Class 10		
Class 11	ins	Class 11	Note 4	
Class 12	Forsh	Class 12		
Class 13	Note 3	Class 13	Note 5	

Note 1: Leachate and surface water quantities will vary over the lifespan of the Landfill. Refer to Table 3.7.4, Volume II of the EIS for further details

Note 2: The application includes for the potential to carry out the treatment/pretreatment on-site of leachate collected from the lined cells on-site and therefore quantities are not available

Note 3: This activity is limited to the temporary storage of unacceptable wastes in the waste quarantine area prior to dispatch off-site, therefore quantities will vary dependent on waste loads accepted at the facility.

Note 4: The application includes for the utilisation on-site of the compost produced in the composting facility, for restoration or construction purposes at the facility for instance for landscaping, landfill cover, and therefore quantities will vary.

Note 5: The application also provides for the temporary storage at the site of compost intended for utilisation for restoration or construction purposes at the facility for instance for landscaping, landfill cover, etc. The application also provides for the temporary storage of unacceptable waste in the waste quarantine area pending its dispatch from the site to alternative waste recovery facilities and therefore quantities will vary.

epa

In Table H. 1 (B) provide the annual amount of waste handled/to be handled at the facility. Additional information should be included in **Attachment H.1.** The tonnage per annum should be given of that expected for the life of the licence, with at least the next five years tonnages provided. For Landfill Review applications provide an estimate of the quantity of waste already deposited in (i) lined cells; (ii) unlined cells.

Year	Non-hazardous waste (tonnes per annum)	Hazardous waste (tonnes per annum)	Total annual quantity of waste (tonnes per annum)
2008	265,000*		265,000
2009	385,000		385,000
2010	385,000		385,000
2011	385,000		385,000
2012			
2013	385,000	مى	385,000
2014	385,000	Left US	385,000
2015	265,000	1. NOT	265,000
2016	145,000	only and	145,000
2017	145,000	ose die	145,000
2018	145,000	DUTPOLIN	145,000
2019	145,000	ation serve	145,000
2020	145,000	C OWL	145,000
2021	145,000	egt.	145,000
2022	145,000		145,000
2023	145,000	ection purposes only, any other use.	145,000
2024	145,000		145,000
2025	145,000		145,000
2026	145,000		145,000
2027	145,000		145,000

#### Table H.1(B) Annual Quantities and Nature of Waste

\* Note that the landfill facility only commenced operations in February 2008 and tonnages deposited at the landfill for 2008 are not yet available. The intensification of the landfilling of waste is proposed to commence in mid 2008 and finish in mid 2015, spanning a 7-year period.

A detailed inventory of the types and quantities of wastes currently handled at the site and proposed to be handled should be submitted as Table H.1 (C).



### TABLE H.1 (C) WASTE TYPES AND QUANTITIES

WASTE TYPE	TONNES PER ANNUM (existing)	TONNES PER ANNUM (proposed)	TOTAL (over life of site) tonnes
Household	58,000	154,000 (for a 7 Yr period)	1,832,000
Commercial	29,000	77,000 (for a 7 Yr period)	916,000
Sewage Sludge			
Construction and Demolition			
Industrial Non- Hazardous Sludges			
Industrial Non- Hazardous Solids	58,000	154,000 (for a 7 Yr period)	1,832,000
Hazardous			
*(Specify detail in Table H 1.2)		s vice.	
Inert Waste imported for restoration	COMPLETI	FOR Johl: Mile use south of the second secon	AMINATED LAND
purposes		Dillectin	

# \* TABLE H.1.2 HAZARDOUS WASTE Types and QUANTITIES

HAZARDOUS WASTE	DETAILED DESCRIPTION * REFERENCE SHOULD BE MADE TO THE RELEVANT EUROPEAN WASTE CATALOGUE CODES AS PRESENTED BY COMMISSION DECISION 2000/532/EC	Tonnes Per Annum (Existing)	(Tonnes Per Annum Proposed)		
Waste Oil					
Oil filters					
Asbestos					
Paint and Ink					
Batteries					
Fluorescent Light Bulbs					
Contaminated Soils					
OTHER HAZAI	<b>OTHER HAZARDOUS WASTE (APPLICANT TO SPECIFY)</b>				



Attachment H.1 should contain any relevant additional information.

It should be noted that an applicant may be issued with a licence which restricts the type of wastes which may be deposited.

#### H.2 Waste Acceptance Procedures

Procedures for checking waste loads as they arrive at the facility must be included. These should follow the requirements of the Agency's Waste Acceptance Manual. A copy of these procedures and other associated documentation should be included as Attachment H.2.

#### H.3 Waste Handling

Waste handling and the operating procedures used at the facility including waste treatment processes should be described in Attachment H.3. Included in the attachment should be information on the plant used on site and on the methods and processes for handling waste on-site. Special requirements hold for contaminated soil facilities, see Guidance Note.

## In addition, an application for a Landfill requires Section H.3.a to be

**H.3a** Waste Handling at the Landfill Facility in the State whether all waste will be and information State whether all waste will be subject to treatment prior to landfilling. Provide information as to the quantities of biodegradable municipal waste and how the targets of the Landfill Directive (1999/31/EC) relating to that waste type are to be achieved. In particular describe how the following will be achieved:

- (a) a reduction by 16/0 75% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available:
- (b) a reduction by 16/07/09 to 50% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest vear before 1995 for which standardised Eurostat data is available;
- (c) a reduction by 16/07/16 to 35% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available:
- (d)Evidence should be provided to show that energy will be used efficiently.

#### H.4 Waste Arisings

Waste Arisings should be considered for all contaminated soil applications. Details of all waste materials generated on the site including, name, description and nature as well as the source(s) should be identified. The quantities of each type of waste generated on an annual/monthly basis should be calculated and stated in Tables H.1(i) and H.1(i) of the application form. Applicants should also provide conversion factors used to relate volume (m<sup>3</sup>) and tonnage (t) for their waste stream.

#### SECTION I EXISTING ENVIRONMENT & IMPACT OF THE FACILITY

Detailed information is required to enable the Agency to assess the existing environment. This section requires the provision of information on the ambient environmental conditions at the site prior to the commencement of waste management activities or prior to the receipt of a review application.

Where development is proposed to be carried out, being development which is of a class for the time being specified under Article 24 (First Schedule) of the Environmental Impact Assessment Regulations, the information on the state of the existing environment should be addressed in the EIS. In such cases, it will suffice for the purposes of this section to provide adequate cross-references to the relevant sections in the EIS.

#### I.1.Assessment of atmospheric emissions

Describe the existing environment in terms of air quality with particular reference to ambient air quality standards.

Provide a statement whether or not emissions of main polluting substances (as defined in the Schedule of S.I. 394 of 2004) to the atmosphere are likely to impair the environment.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

Attachment I.1 should also contain full details of any dispersion modelling of atmospheric emissions from the activity, where required.

#### I.2. Assessment of Impact on Receiving Surface Water

Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Table I.2(i) should be completed

Provide a statement whether or not emissions of main polluting substances (as defined in the Schedule of S.I. 394 of 2004) to water are likely to impair the environment.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.



Full details of the assessment and any other relevant information on the receiving environment should be submitted as **Attachment I.2**.

#### I.3. Assessment of Impact of Sewage Discharge.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

Full details of the assessment and any other supporting information should form Attachment I.3.

#### I.4 Assessment of impact of ground/groundwater emissions

The scope and detail of this assessment will depend to a large extent on the extent and type of ground emissions at any site, which in turn are related to the risk. Details should be included in **Attachment I.4**. Comprehensive guidelines are contained in the *Application Guidance Note*, and include particular requirements for landfill and brownfield facilities.

Describe the existing groundwater quality. Tables I.4(i) should be completed.

#### I.5 Ground and/or groundwater contamination

Summary details of known ground and/or groundwater contamination, historical or current, on or under the site must be given.

Full details including all relevant investigative studies, assessments, or reports, monitoring results, location and design of monitoring installations, appropriately scaled plans/drawings ( $\leq A3$ ), documentation, including containment engineering, remedial works, and any other supporting information should be included in **Attachment I.5**.

I.6 Noise Impact.

Give details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

#### Ambient noise measurements

Complete Table I.6(i) in relation to the information required below:

(i) State the maximum Sound Pressure Levels which will be experienced at typical points on the boundary of the operation. (State sampling interval and duration)

Page 37 of 41



- (ii) State the maximum Sound Pressure Levels which will be experienced at typical noise sensitive locations, outside the boundary of the operation.
- (iii) Give details of the background noise levels experienced at the site in the absence of noise from this operation.

Prediction models, appropriately scaled maps ( $\leq A3$ ), diagrams and supporting documents, including details of noise attenuation and noise proposed control measures to be employed, should form **Attachment I.6**.

#### I.7 Assessment of Ecological Impacts & Mitigation Measures

The ecology of the site and the surrounding area should be assessed in the vicinity of the largescale waste facilities such as landfill or incinerator developments. An assessment of the ecology should form **Attachment I.7.** Comprehensive guidelines are contained in the *Application Guidance Note* 

#### SECTION J ACCIDENT PREVENTION & EMERGENCY RESPONSE

Describe the existing or proposed measures, including emergency procedures, to minimise the impact on the environment of an accidental emission or spillage.

Also outline what provisions have been made for response to emergency situations outside of normal working hours, i.e. during night-time, weekends and holiday periods.

Describe the arrangements for abnormal operating conditions including start-up, leaks, malfunctions or momentary stoppages.

Supporting information should form Attachment J.

Attachment included	yes 🖂 🛛 n	no not applicable	
---------------------	-----------	-------------------	--

#### SECTION K REMEDIATION, DECOMMISSIONING, RESTORATION AND AFTERCARE

Describe the existing or proposed measures to minimise the impact on the environment after the activity or part of the activity ceases operation, including provision for post-closure care of any potentially polluting residuals.

For Landfill Applications, capping proposals are required, and reference should be made to the *Landfill Manual on 'Restoration and Aftercare'* published by the Agency, when completing this section.



Attachment included yes no not applicable

#### SECTION L STATUTORY REQUIREMENTS

#### L. 1 Section 40(4) WMA

Indicate how all the requirements of Section 40(4)[(a) to (i)] of the Waste Management Acts 1996 to 2003 will be met.

Applicants should also describe how the proposed facility will comply with the requirements of BAT. In particular reference should be made to the considerations referred to in Annex IV of Council Directive 96/61/EC concerning integrated pollution prevention and control.

Attachment L.1 should contain the documentation requested above, along any relevant additional information.

	W. Mothe	<b>&gt;</b>
Attachment included	yes State	not applicable
	ourposities	
	ction be rect	
	inspiron and	
I ) Elt and Duon an Damaan	FOLYTTE	
L.2 Fit and Proper Person	8	

The WMA in Section 40(4)(d) specifies that the Agency shall not grant a licence unless it is satisfied that the applicant (if the applicant is not a local authority) is a fit and proper person. Section 40(7) of the WMA specifies the information required to enable a determination to be made by the Agency.

- Indicate whether the applicant or other relevant person has been convicted under the Waste Management Acts 1996 to 2003, the EPA Act 1992 and 2003, the Local Government (Water Pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.
- Provide details of the applicant's technical knowledge and/or qualifications, along with that of other relevant employees (Link to Section C.1 of the application).
- 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 or in consequence of ceasing to carry out that activity (Link to Section K of the application).



Supporting information should be included as Attachment L 2 with reference to where the information can be found in the application.

Attachment included	yes 🖂	no	not applicable

Consent of copyright owner required for any other use.



#### SECTION M DECLARATION

#### Declaration

I hereby make application for a licence / revised licence, pursuant to the provisions of the Waste Management Acts 1996 to 2003 and Regulations made thereunder.

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and local authority offices, and via the EPA's website. This consent relates to this application itself and to any further information, submission, objection, or submission to an objection whether provided by me as Applicant, any person acting on the Applicant's behalf, or any other person.

igned by: Dh. Chnoll, an other use. Date : Dete : D	
rint signature name:	
osition in organisation : MANAGER, WASTE MANAGEMENT	
Control Company stamp or seal:	

	Company stamp or seal:		
BC	ORD NA MONA	p.l.c.	
		nan kana kana kana kana kana kana kana	

Page 41 of 41



# **ANNEX 1 STANDARD FORMS**

Standard forms are provided in this section for the recording and presentation of environmental monitoring and site investigation results

# TABLE E.1(i)LANDFILL GAS FLARE EMISSIONS TO ATMOSPHEREEmission Point:

Not Applicable

Emission Point Ref. Nº:	
Location :	ِي.
Grid Ref. (12 digit, 6E,6N):	other 150
Vent Details Diameter:	or inspection purposes only and of
Height above Ground(m):	A install
Date of commencement of emission:	HOLODITS .
emission:	\$ <sup>0</sup>

#### **Characteristics of Emission :**

СО				mg/m <sup>3</sup>
Total organic carbon (T	OC)			mg/m <sup>3</sup>
NOx		0°C. 3	3% O2(Liquid or Gas), 6	mg/Nm <sup>3</sup> % O <sub>2</sub> (Solid Fuel)
Maximum volume of e	mission			m <sup>3</sup> /hr
Temperature	°C	(max)	°C(min)	°C(avg)

(i) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up/shutdown to be included*):

Periods of Emission (avg)	min/hr	hr/day	day/yr
---------------------------	--------	--------	--------



## TABLE E.1(ii) MAIN EMISSIONS TO ATMOSPHERE (1 Page for each emission point)

Refer to Section 4.1, Volume II of the EIS.

Emission Point Ref. N	<u>"</u> .						
Source of Emission:							
Location :	Location :						
Grid Ref. (12 digit, 6E,6N):							
Vent Details							
Diame	eter:						
Height above Ground	(m):						
Date of commencemen	ıt:	net use.					
Characteristics of Emi	ssion :	pupoes only any one use.					
(i) Volume to be e	emitted:	net					
Average/day	For M3/d	Maximum/day	m <sup>3</sup> /d				
Maximum rate/hour	Maximum rate/hour of m <sup>3</sup> /h Min efflux velocity m.sec <sup>-1</sup>						
(ii) Other factors							
Temperature	perature °C(max) °C(min) °C(avg)						
For Combustion Source Volume terms express		t. □ dry	_%O2				

(iii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)	min/hr	hr/day	day/yr
Periods of Emission (avg)	min/hr	hr/day	day/yr



#### TABLE E.1(iii): MAIN EMISSIONS TO ATMOSPHERE

**Chemical characteristics of the emission** (1 table per emission point)

Emission Point Reference Number:\_\_\_\_\_

Parameter	Prior to tr		Prior to treatment <sup>(1)</sup>		Brief			As discl	harged <sup>(1)</sup>		
	mg/	Nm <sup>3</sup>	kg	y/h	description	mg/	Nm <sup>3</sup>	kg	ŗ/h.	kg/	year
	Avg	Max	Avg	Max	of treatment	Avg	Max	Avg	Max	Avg	Max
				Consent of cor	spection purposes only, any other use.						

1. Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0°C,101.3kPa). Wet/dry should be the same as given in Table E.1(ii) unless clearly stated otherwise.



#### TABLE E.1(iv): EMISSIONS TO ATMOSPHERE-Minor /Fugitive

Emission point	Description		Emission	details <sup>1</sup>	Abatement system employed	
Reference Numbers		material	mg/Nm <sup>3(2)</sup>	kg/h.	kg/year	
	C	For inspection	A PUPOSE ONLY.	any other use.		

1 The maximum emission should be stated for each material emitted, the concentration should be based on the maximum 30 minute mean.

2 Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0°C101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.

Conserved constitution purposes only, any other use.



# **TABLE E.2(i):EMISSIONS TO SURFACE WATERS**<br/>(One page for each emission)

Refer to Section 4.4, Volume II of the EIS.

Emission Point:	metuse
Emission Point Ref. Nº:	autoost of the server of the s
Source of Emission:	puposited.
Location :	.nspection net
Grid Ref. (10 digit, 5E,5N):	Fortige
Name of receiving waters:	. Meentot
Flow rate in receiving	m <sup>3</sup> .sec <sup>-1</sup> Dry Weather Flow
waters:	m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow
Available waste assimilative capacity:	kg/day

**Emission Details:** 



(i) Volume to be emitted				
Normal/day	m <sup>3</sup>	Maximum/day	m <sup>3</sup>	
Maximum rate/hour	m <sup>3</sup>			

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)	min/hrhr/dayday
	tion Purportie
	Consent of copyright owner requir
	AL DE COR
	Conser



#### TABLE E.2(ii): EMISSIONS TO SURFACE WATERS Characteristics of the emission (1 table per emission point)

Emission point reference number :\_\_\_\_\_

Parameter		Prior to treatment			As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average. (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
			ර්	For inspection	Purpose out for any o				



#### TABLE E.3(i): EMISSIONS TO SEWER(One page for each emission)

Not Applicable

#### **Emission Point:**

Emission Point Ref. Nº:	
Location of connection to sewer :	
Grid Ref. (10 digit, 5E,5N):	
Name of sewage undertaker:	

#### **Emission Details:**

(i) Volume to be emitted		met use.	
Normal/day	m <sup>3</sup>	Maximum/day	m <sup>3</sup>
Maximum rate/hour	m <sup>3</sup>	outposedte	

Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)	min/hr	hr/day	day/yr
---------------------------	--------	--------	--------



## TABLE E.3(ii): EMISSIONS TO SEWER Characteristics of the emission (1 table per emission point)

Emission point reference number :\_\_\_\_\_

Parameter		Prior to treatment			As discharged			% Efficiency	
	Max. hourly average	Max. daily average	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
	(mg/l)	(mg/l)				se.			
					For inspection purposes only.	ther			
					- COY				
Consent of									

Conserved constitution purposes only, any other use.



#### TABLE E.4(i): EMISSIONS TO GROUNDWATER (1 Page for each emission point)

Refer to Section 4.3, Volume II of the EIS.

## **Emission Point or Area:**

Emission Point/Area Ref. Nº:		<u>_</u> 0.
Emission Pathway: (borehole, well, percolation area, soakaway, landspreading, etc.)	tion put of the test of test of the test of te	ner us
Location :	Pupos	
Grid Ref. (10 digit, 5E,5N):	Section et	
Elevation of discharge: (relative to Ordnance Datum)	For inspection put four	
Aquifer classification for receiving groundwater body:	Consent	
Groundwater vulnerability assessment (including vulnerability rating):		
Identity and proximity of groundwater sources at risk (wells, springs, etc):		
Identity and proximity of surface		



water bodies at risk:	
-----------------------	--

#### **Emission Details:**

(i) Volume to be emi	tted		
Normal/day	m <sup>3</sup>	Maximum/day	m <sup>3</sup>
Maximum rate/hour	m <sup>3</sup>		aly any are

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

	N. C.
Periods of Emission (avg)	min/hrhr/day ecitometday/yr
	For pring
	Const



#### Table E.5(i): NOISE EMISSIONS-Noise sources summary sheet

Refer to Section 4.1.2, Volume II of the EIS.

Source	Emission point Ref. No	Equipment Ref. No	Sound Pressure <sup>1</sup> dBA at reference distance	BA at reference Sound Pressure <sup>1</sup> Levels dB(unweighted) per band							Impulsive or tonal qualities	Periods of Emission		
				31.5	63	125	250	5.00	1K	2K	4K	8K		
							ath	X US						
						Son	y. any							
					00	Pose red	*							
					oction for	40 1								
				Forms	ht									
				FOT DYN R OF COPYN										
			Colle											

1. For items of plant sound power levels may be used.



## TABLE F.1: ABATEMENT / TREATMENT CONTROL

#### Emission point reference number :\_\_\_\_

Control <sup>1</sup> parameter	Equipment <sup>2</sup>	Equipment maintenance	Equipment calibration	Equipment back-up

Control <sup>1</sup> parameter	Monitoring to be carried out <sup>3</sup>	Monitoring equipment	Monitoring equipment calibration
	on inspect	on purposes only any others	

<sup>1</sup> List the operating parameters of the treatment / abatement system which control its function.
 <sup>2</sup> List the equipment necessary for the proper function of the abatement / treatment system.
 <sup>3</sup> List the monitoring of the control parameter to be carried out.



#### **TABLE F.2 to F.8 : EMISSIONS MONITORING AND SAMPLING POINTS**

(1 table per media)

Air – Monitoring and Sampling Points Refer to Sections 3.15.1, 3.15.7 and 3.15.8 Volume II of the EIS.

Surface Water- Monitoring and Sampling Points Refer to Sections 3.15.9 and 3.15.10, Volume II of the EIS.

Groundwater- Monitoring and Sampling Points Refer to Section 3.15.2, Volume II of the EIS.

Noise- Monitoring and Sampling Points Refer to Section 3.15.6, Volume II of the EIS.

Consent of constitution of the providence of the any other use. Meteorological Data- Monitoring and Sampling Points Refer to Section 3.15.5, Volume II of the EIS.

Leachate- Monitoring and Sampling Points Refer to Section 3.15.4, Volume II of the EIS.



Emission Point Reference No(s). :\_\_\_\_\_

Parameter	Monitoring frequency	Accessibility of Sampling Points	
			· 15°.
			other
			MIN. and
		er e	-2 <sup>10</sup>
		Purpeni	~
		Consent of copyright owned control	
		Forthigh	-
		entor	
		Colle	



## TABLE Ff: Fugitive ENVIRONMENT MONITORING AND SAMPLING LOCATIONS (1 table per media)

Monitoring Point Reference No :\_\_\_\_\_

Parameter	Monitoring frequency	Accessibility of Sampling point	
		Consent of copyright own	upose only an other use.



## Table G.1 Details of Process related Raw Materials, Intermediates, Products, etc., used or generated on the site

Refer to Section 3.13.6, Volume II of the EIS.

Ref. Nº or Code	Material/ Substance <sup>(1)</sup>	CAS Number	Danger <sup>(2)</sup> Category	Amount Stored (tonnes)	Annual Usage (tonnes).	Nature of Use	R <sup>(3)</sup> - Phrase	S <sup>(3)</sup> - Phrase	
				uposesond for	any other b				
Notes:			a number of distinct and availa	dangerous	s substance	s, please give details for each c	omponent s	substance.	
2. c.f. Article 2(2) of SI N <sup>o</sup> 77/94 3. c.f. Schedules 2 and 3 of SI N <sup>o</sup> 77/94 <i>to instruction of the provided of the second second</i>									
			Cor						



#### TABLE H.1(i): WASTE Hazardous Waste Recovery/Disposal

Not Applicable

Waste material	EWC Code	Main source <sup>1</sup>	Qı	antity	On-site Recovery/Disposal	Off-site Recovery, reuse or recycling	Off-site Disposal
·			Tonnes / month	m <sup>3</sup> / month of the state	(Method & Location )	(Method, Location & Undertaker)	(Method, Location & Undertaker)
		Ċ	month Forthspection	putoses only and techned for and			

 $^1$   $\,$  A reference should be made to the main activity / process for each waste.



#### TABLE H.1(ii) WASTE - Other Waste Recovery/Disposal

Waste material	EWC Code	Main source <sup>1</sup>	Qua	ntity	On-site recovery/disposal <sup>2</sup>	Off-site Recovery, reuse or recycling	Off-site Disposal
Γ			Tonnes / month	m <sup>3</sup> / month	(Method & Location)	(Method, Location & Undertaker)	(Method, Location & Undertaker)
					other use.		
					South BUN OF		
				purpose	Hed for		
				ction purper real			

1

A reference should be made to the main activity/ process for each waste. The method of disposal or recovery should be clearly described and referenced to Attachment H.1 2



## Table I.2(i) SURFACE WATER QUALITY

Refer to Sections 2.5, 3.12.6, 3.15.9, 3.15.10 and 4.4, Volume II of the EIS.

(Sheet 1 of 2) Monitoring Point/ Grid Reference:

Parameter			sults ng/l)		Sampling method <sup>2</sup> (grab, drift us <sup>6</sup> etc.) off <sup>61</sup>	Normal Analytical Range <sup>2</sup>	Analysis method / technique
	Date	Date	Date	Date	aly any		
pH					es afor		
Temperature					Postied +		
Electrical conductivity EC				ion P	KOX		
Ammoniacal nitrogen NH <sub>4</sub> -N				Dectrowine			
Chemical oxygen demand				at insent			
<b>Biochemical oxygen demand</b>				FOR			
Dissolved oxygen DO			న	5			
Calcium Ca			oliselt				
Cadmium Cd			Cor				
Chromium Cr							
Chloride Cl							
Copper Cu							
Iron Fe							
Lead Pb							
Magnesium Mg							
Manganese Mn							
Mercury Hg							

epa

Conserved constration on the required for any other use.



## Surface Water Quality (Sheet 2 of 2)

Parameter			sults ıg/l)		Sampling method (grab, drift etc.)	Analysis method / technique	
	Date	Date	Date	Date			
Nickel Ni							
Potassium K							
Sodium Na							
Sulphate SO <sub>4</sub>							
Zinc Zn					there		
Total alkalinity (as CaCO <sub>3</sub> )					27.02		
Total organic carbon TOC					es offor a		
Total oxidised nitrogen TON					2050 inco		
Nitrite NO <sub>2</sub>				an Po	tede		
Nitrate NO <sub>3</sub>				oectio whe			
Faecal coliforms ( /100mls)				TINSTIL			
Total coliforms (/100mls)				topying			
Phosphate PO <sub>4</sub>				d'e			
			Conser	<b>y</b>			



# Table I.4(i) GROUNDWATER QUALITY

Refer to Sections 2.4, 3.12.5, 3.15.2, and 4.3, Volume II of the EIS.

Parameter			esults ng/l)		Sampling method (composite etc.)	NormalAnalysisAnalyticalmethod /Rangetechnique			
	Date	Date	Date	Date					
рН									
Temperature					The.				
Electrical conductivity EC					other				
Ammoniacal nitrogen NH <sub>4</sub> -N				ally	· and				
Dissolved oxygen DO				Ses At	5				
<b>Residue on evaporation</b> (180°C)				tion purposition for the second for the second seco					
Calcium Ca			Se la construcción de la constru	OWNE OWNE					
Cadmium Cd			× × • • •						
Chromium Cr			to the						
Chloride Cl			x Or						
Copper Cu			onsent						
Cyanide Cn, total			C						
Iron Fe									
Lead Pb									
Magnesium Mg									
Manganese Mn									
Mercury Hg									
Nickel Ni									
Potassium K									
Sodium Na									

(Sheet 1 of 2) Monitoring Point/ Grid Reference:



# GROUNDWATER QUALITY (SHEET 2 OF 2)

Parameter			(mg/l)		Sampling method (composite, dipper etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
Phosphate PO <sub>4</sub>							
Sulphate SO <sub>4</sub>							
Zinc Zn							
Total alkalinity (as CaCO <sub>3</sub> )							
Total organic carbon TOC							
Total oxidised nitrogen TON					150.		
Arsenic As					othert		
Barium Ba					the the		
Boron B				్లల్	of of the second		
Fluoride F				alloui	ter		
Phenol				apeciant pit real			
Phosphorus P				Dectrowine			
Selenium Se			¢Č	ill'alle			
Silver Ag			N.	023			
Nitrite NO <sub>2</sub>			atof				
Nitrate NO <sub>3</sub>			onsent				
Faecal coliforms ( /100mls)			0				
Total coliforms (/100mls)							
Water level (m OD)							



## Table I.6(i) Ambient Noise Assessment

Refer to Sections 2.2.2, 3.12.2, 3.15.6 and 4.1.2, Volume II of the EIS.

Third Octave analysis for noise emissions should be used to determine tonal noises

	National Grid Reference	Sound Pressure Levels		
	(5N, 5E)	L(A) <sub>eq</sub>	L(A) <sub>10</sub>	L(A)90
1. SITE BOUNDARY				
Location 1:				
Location 2:				
Location 3:				
Location 4:				
2. NOISE SENSITIVE LOCATIONS			<u>ر</u> و.	
Location 1:			a per UP	
Location 2:			ay oth	
Location 3:		OILO	311	
Location 4:		Dose edt		

NOTE: All locations should be identified on accompanying drawings.