# Review of Waste Licence Application (131-1) Midland Waste Disposal Company Ltd.,

# Attached:

- 1 original and 3 copies of Waste Licence Application and Attachments
- 1 original and 3 copies of Environmental Impact Statement
- 1 CD-ROM disk of Waste Licence Application & Attachments and Environmental Impact Statement
- (1) CD-ROM disks of Environmental Impact Statement

Check of payment

Special Purposes orthy any other to

ENVIRONMENTAL PROTECTION AGENCY WASTE LICENSING RECEIVED

3 0 MAR 2005

INITIALS.NK.

# CD Placeholder

This page denotes that a CD entitled "Review of Waste Licence for Midland Waste Disposal Company Ltd." dated 30/03/05 was submitted as part of this licence application.

The CD is held by the EPA at

Licensing Unit,
OLG,
EPA,
P.O. Box 3000
Johnstown Castle Estate,
Wexford.

131-2

REVIEW OF WASTE LICENCE FOR

MIDLAND WASTE DISPOSAL COMPANY LTD.,

PROUDSTOWN, NAVAN,

COUNTY MEATH

WL 131-1

ENVIRONMENTAL PROTECTION AGENCY WASTE LICENSING RECEIVED

3 0 MAR 2005

INITIALS...NK







# Waste Licence Application Form

EPA Ref. No.: WOISI-O

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

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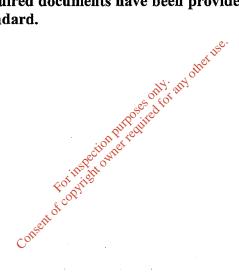
# **ANNEX 1: STANDARD FORMS**



# INTRODUCTION

A valid application must contain the information prescribed in the Waste Management (Licensing) Regulations 2004 (SI No. 395 of 2004). The application should conform to the format set out in this application form and the relevant Guidance Note. Each page of the completed application form must be numbered, e.g. page 5 of 45, etc. Wherever possible, information should be supplied in the spaces given in the application form. Additional information can be included in clearly identifiable, numbered attachments, which should be cross-referenced with the relevant sections in the application form. A contents list should be included with each volume. The applicant should refer to the Guidance Note in order to ensure that the application includes all the information required. Consistent measurement units must be used throughout.

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,

LOCATION	B1	aile	· ·	
CHECKED	Applicant	X any any	Official	

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

	SV VO			
LOCATION	B3 cot right		,	
CHECKED	Applicant	X	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	Not Applicable	
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	B2			
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	В7		
CHECKED	Applicant	$\boxtimes$	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	В7			
CHECKED	Applicant	$\boxtimes$	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	H1			
CHECKED	Applicant	$\boxtimes$	Öfficial	

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

LOCATION	G1 instant		
CHECKED	Applicant	$\boxtimes$	Official

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

LOCATION	D2 & F1			
CHECKED	Applicant	$\boxtimes$	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	L1			
CHECKED	Applicant	$\boxtimes$	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	Section E		
CHECKED	Applicant	$\boxtimes$	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,

LOCATION	EIS (Section 2)	
CHECKED	Applicant 🛚	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	Section F2 – F9	अधितः व्याप		
CHECKED	Applicant	\$ 31°0°	Official	

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

LOCATION	Not Applicable	
CHECKED	Applicant _	Official

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

LOCATION	EIS (section 2.3)	
CHECKED	Applicant	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	Section E			
CHECKED	Applicant	$\boxtimes$	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	Section K			
CHECKED	Applicant	$\boxtimes$	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	Not Applicable	
CHECKED	Applicant	Official

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

CHECKED Applicant Official	LOCATION	Not Applicable	व्याप्त्रं व्याप्त्	-	
	CHECKED	Applicant [	of so to	Official	

(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,

	ons		
LOCATION	B.8		
CHECKED	Applicant	$\square$	Official

(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	EIS (Section 2.3)	
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	Section A		<del>**</del> *	
CHECKED	Applicant	$\boxtimes$	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 or newspapers in which the notice in accordance with article 6 has been published,

LOCATION	B6		
CHECKED	Applicant	$\boxtimes$	Official

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

LOCATION	B6		1158	
CHECKED	Applicant	X diffe	Official	

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

	ec A	Y	
LOCATION	B3 instant		
CHECKED	Applicant	$\boxtimes$	Official

- (d) a copy of such plans, 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,

<b>LOCATION</b>	B6			
CHECKED	Applicant	$\boxtimes$	Official	

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

LOCATION	Section E		
CHECKED	Applicant	$\boxtimes$	Official

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

LOCATION	Section F			
CHECKED	Applicant	$\boxtimes$	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) An application by a local authority in respect of the carrying on of an activity at a facility within the functional area of the authority shall be accompanied by 2 copies of the application and of all accompanying documents and particulars as required under subarticle (4).

PROVIDED Y/N	Not Applicable	
CHECKED	Applicant 🗌	Official 🗌

Article 12(5)(b) An application other than one to which paragraph (a) refers shall be accompanied by 3 copies of the application or such other number of copies as the Agency shall determine and of all accompanying documents and particulars as required under subarticle (4).

PROVIDED Y/N Y		
CHECKED Applicant	$\boxtimes$	Official
Co		

Article 12(5)(c) For the purposes of paragraphs (a) and (b), all or part of the necessary copies of the said application and associated documents and particulars may, with the agreement of the Agency, be submitted in a computer or other non-legible format specified by the Agency.

CD version as PDF files PROVIDED? Y/N	Y			
CHECKED	Applicant	$\boxtimes$	Official	



Article 13

Where a development requires an Environmental Impact Assessment to be carried out, 3 copies of the environmental impact statement plus 11 copies on CD should accompany this application.

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

Article 13 (6) Notwithstanding the requirements of sub-articles (1) and (2), all or part of 3 copies of the environmental impact statement may, with the agreement of the Agency, be submitted in a computer or other non-legible format specified by the Agency.

CD version PROVIDED? Y/N	Y	24. VJ	thet	
CHECKED	Applicant	Sofford	Official	
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	t of cold.			
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C				



# 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 direction of north
- 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 up 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. Provide legends on all drawings and maps as appropriate.

Applicants must submit a signed original of the completed application, plus three copies (two copies where the application is by a local authority in respect of the carrying on of an activity located within the functional area of the authority)<sup>1</sup>. In cases where an Environmental Impact Statement (EIS) is required then the Agency must be supplied with three copies of the EIS. In addition the applicant must submit one copy of the complete application on a CD-ROM, and eleven CD-ROM copies of the EIS to the Agency. The e-files should be saved as a 'pdf' file, read only status.

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

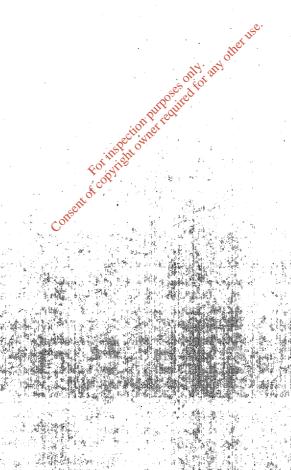
<sup>&</sup>lt;sup>1</sup> Article 12(5) of the Regulations



# 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.



# SECTION B GENERAL

# **B.1** Applicant's Details

Name*:	Midland Waste Disposal Company Ltd., (Waste Licence 131-1)
Address:	Clonmagaddan,
	Proudstown
	Navan
	Co. Meath
Tel:	046 9022222
Fax:	046 9027899
e-mail:	

# 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:	Midland Waste Disp	osal Company Ltd., (Waste Licence 131-1)	
Address:	Clonmagaddan,	oo ired	
	Proudstown	n Pilitelia	
	Navan	ectionie	
	Co. Meath	, its dit	
Tel:	046 9022222	FORM	
Fax:	046 9027899	, of C	
e-mail:		ansett	

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

Address:	
	,
Tel: Fax: e-mail:	
Fax:	
e-mail:	

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.

<sup>\*</sup> 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.



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

Landowner		
Lessee		
	e Purchaser	
Other (plea	ase specify)	
	address of all occupiers of the land on which the Activity is situated (if different named above).	from
Name:	Not Applicable	
Address:		
· · · · · · · · · · · · · · · · · · ·		
Tel:		
Fax:	,	
e-mail:	address of the current's owner(s) and lessees of the land huildings and ancillary plant	
e-mail:  Name and a on which the A drawing s	address of the current* owner(s) and lessees of the land, buildings and ancillary plant the activity is or will be situated (if different from applicant named above). showing the above details should be included in Attachment B1.	
e-mail:  Name and a on which the A drawing s	address of the current* owner(s) and lessees of the land, buildings and ancillary plant the activity is or will be situated (if different from applicant named above).	
e-mail:  Name and a on which the A drawing so Name:	address of the current* owner(s) and lessees of the land, buildings and ancillary plant the activity is or will be situated (if different from applicant named above). showing the above details should be included in Attachment B1.	
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e-mail:  Name and a on which the A drawing so the Name: Address:  Tel: Fax: e-mail:	address of the current* owner(s) and lessees of the land, buildings and ancillary plant the activity is or will be situated (if different from applicant named above). showing the above details should be included in Attachment B1.	
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e-mail:  Name and a on which the A drawing series.  Name: Address:  Tel: Fax: e-mail: *Current at	address of the current* owner(s) and lessees of the land, buildings and ancillary plant the activity is or will be situated (if different from applicant named above). showing the above details should be included in Attachment B1.  Not Applicable  The land of	

Name:	Midland Waste Disposal Company Ltd., (Waste Licence 131-1)			
Address*:	Clonmagaddan,			
HELDON TO THE TOTAL PROPERTY OF THE TOTAL PR	Proudstown			
	Navan			
	Co. Meath			
Tel:	046 9022222			
Fax:	046 9027899			
e-mail:				

<sup>\*</sup> Include any townland



National Grid Reference (8 digit 4E,4N)	E2868 N2698
Contigue 410 410 by the second of the second	

Location maps with grid references should be enclosed in Attachment B.2. The site boundary must be outlined on the map in colour.

As Per Original Application (Waste Licence 131-1)

Original maps of the relevant area, such as maps from the Ordnance Discovery Series, from which the site grid reference can be read and confirmed, must be included in **Attachment B.2.**As Per Original Application (Waste Licence 131-1)

# **B.3** Planning Authority

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

Name:	Meath County Council		
Address:	County Hall		
	Navan		
	Co. Meath		
Tel:	046 9021581		
Fax:	046 9021463	diffe	

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 No

Planning Permission relating to this application:-

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

Local Authority Planning	P90/1370
File Reference №:	99/1518
	NA20088

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*.

# <u>ം</u> ഉ<u>മ</u>

# WASTE Application Form

# **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.

Not Applicable					
				******	
		-			
	Not Applicable				

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.5Other 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 🖂

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

Name:	North Eastern Health Board &
Address:	Bord Slainte An Oir Thuasiscirt
	Administrative Head Office
	Kells, County Meath
Tel:	061 316655
Fax:	061 483350

#### **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 a drawing 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 MANAGEMENT ACTS 1996 TO 2003

Waste Manage	ment	Acts 1996 to 2003	
THIRD SCHEDULE Waste Disposal Activities	Y/N	FOURTH SCHEDULE Waste Recovery Activities	Y/N
Deposit on, in or under land (including landfill).		1 Solvent reclamation or regeneration.	
2. Land treatment, including biodegradation of liquid or sludge discards in soils.	aut poss.	2. Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).	Y
<ol> <li>Deep injection of the soil, including injection of pumpable discards into wells, salt domes or naturally occurring repositories.</li> </ol>	Whet ies	Recycling or reclamation of metals and metal compounds.	Y
Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.		Recycling or reclamation of other inorganic materials.	P
<ol> <li>Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.</li> </ol>		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.	, `t.,	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.	
Permanent storage, including emplacement of containers in a mine.		Use of any waste principally as a fuel or other means to generate energy.	
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.	Y	11. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.	Y
12. Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.	Y	12. Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.	Y
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.	Y	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.	Y

#### 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)		2002	2003	2004	2005	2006	2007
Year	13, 386	30,442	40,475	50,491	80,000	95,000	95,000

#### REFER TO ATTACHMENT B7

#### **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	10,000 10,000
disposal activity 1.1 – 3.3)	set dio
Recovery of Waste (4)	6,0000
Total:	€16,000

# TABLE B.7.4 (FOR A LANDFILL APPLICATION) NOT APPLICABLE

STATE WHICH OF THE FOLLOWING IS RELEVANT TO THE CURRENT APPLICATION.

(a) landfill for hazardous waste	
(b) landfill for non-hazardous waste	
(c) landfill for inert 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.

<ul> <li>I will be a superior of the control of</li></ul>		
■ 8. The AL (2021) 12. Page 12. Line 200 (A. Line 2011) 2011 2011, 2011, 2011, 2011, 2011, 2011, 2011, 2011	1 17 1	INT. INZI I
I Regulations Apply	I Yes I I	ו או אוו
I ICEMIANOUS EXPOIT	1 1 00 1 1	1 1 1 0 1 1

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**.

Name	Position	Duties and Responsibilities	Experience /Qualifications
Mr. Francis Flynn	General Manager	Overall responsibility and management of site. Maintenance of licence. Health & Safety on site	Over 7 years Experience in the Waste Sector; FAS course
Mr. Mark Duffy	Operations Manager	Management of operations on site; Health & Safety on site of the site;	Over 12 years experience in the waste sector; FAS course

# 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	Table D.1. Infrastructure		Comments
D.1.a	Site security arrangements including gates and fencing	у	See Attachment D1
D.1.b	Designs for site roads	у	As per original application (131-1)
D.1.c	Design of hardstanding areas	У	See Attachment D1
D.1.d	Plant	у	See Attachment D1
D.1.e	Wheel-wash	n	
D.1.f	Laboratory facilities	enise.	
D.1.g	Design and location of fuel storage areas	у	See Attachment D1
D.1.h	Waste quarantine areas	у	See Attachment D1
D.1.i	Waste inspection areas citot de la companya del companya de la companya de la companya del companya de la compa	у	See Attachment D1
D.1.j	Traffic control	У	As per original application (131-1)
D.1.k	Sewerage and surface water drainage infrastructure	у	See Attachment D1
D.1.l	All other services	у	See Attachment D1
D.1.m	Plant sheds, garages and equipment compound	у	As per original application (131-1)
D.1.n	Site accommodation	у	See Attachment D1
D.1.0	A fire control system, including water supply	у	As per original application (131-1)
D.1.p	Civic amenity facilities	n	
D.1.q	Any other waste recovery infrastructure	у	See Attachment D1
D.1.r	Composting infrastructure	у	See Attachment D1
D.1.s	Construction and Demolition waste infrastructure	У	See Attachment D1
D.1.t	Incineration infrastructure (if applicable).  Provide information to fulfil Article 4 (2) & (3) of the Incineration of Waste Directive	n	
D.1.u	Any other infrastructure	n	

# 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*.

ent include	ves  X	no l	not applicable

# LANDFILLS (NOT APPLICABLE)

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.

# D.3 Liner System

Complete the following table regarding 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

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



# **Q.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
D.4.a	Is there a Leachate Management Plan?		
D.4.b	Have annual quantities of leachate been calculated?		
D.4.c	Has the total quantity of leachate been calculated?		
D.4.d	Have the size of the cells been specified taking account of the water balance calculations?		
D.4.e	Has a leachate collection system been specified?		
D.4.f	Has a leachate storage system been specified?		
D.4.g	Has a system for monitoring the level of leachate in the waste been designed?		
D.4.h	Is leachate recirculation proposed/practised?		
D.4.i	Has leachate treatment on site been specified?		
D.4.j	Has leachate removal been specified?		

#### 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 for immediate or current gas collection projects only (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** 

			Comments
D.5a	Is there a Landfill Gas Management Plan?  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?		
D.5c	Does the passive system cover all of the filled area?		
D.5 <b>d</b>	Have gas alarm systems been installed in the site buildings?		
D.5e	Have measures been installed to prevent landfill gas migration (e.g. barriers)?	ny other	çe.
D.5f	Has a time-scale been proposed for the installation of landfill gas infrastructure?		
<b>D.5g</b>	Is gas flaring undertaken at the site?		
<b>D:5h</b>	Is there an active (i.e., pumped) landfill gas extraction system?		
D:5i	Does the active system cover all of the filled area?		
D.5j	Is landfill gas used to generate energy at the site?		
D.5k	Have emissions from the flarestack and utilisation plant been assessed for source, composition, quantity and level and rate?		
<b>D.51</b>	Has a maintenance programme for the control system been specified?	1	
D.5m	Has a condensate removal system been designed?		

# **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 only be completed for immediate projects only (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
D.6a	Has the daily cover been specified?		
D.6b	Has the intermediate cover been specified?		
D.6c	Has the temporary capping been specified?		
D.6d	Has the Capping System been designed and does it meet the requirements of the Landfill Directive Annex 1 (3.3)?	neruse.	
<b>D.6e</b>	Does the Capping System include a flexible membrane liner?		
<b>D.6f</b>	Have all capping materials been specified?		
D.6g	Has a Method Statement for construction been produced?		
<b>D.6h</b>	Has a Quality Control Plan been produced?		
<b>D.6i</b>	Has a Quality Assurance Plan been produced?		
<b>D.6j</b>	Has a programme for monitoring landfill stability been developed?		
D.6k	Has a programme for monitoring landfill settlement been developed?		



# 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 Not Applicable Attachment E.2 Tables E.2(i) and E.2(ii) should be completed where relevant.

E.3 Emissions to Sewer Not Applicable

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

#### 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
and the second of the second	Attachment included	yes 🗌	no⊠	not applicable
Dust Control	Control method specified	yes 🖂	no 🗌	not applicable
and the second s	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
na n	Attachment included	yes ⊠ <sup>™</sup>	no	not applicable
Traffic Control	Control method specified	yes 🛇	no 🗌	not applicable
s <u> </u>	Attachment included	yes 🛛	no	not applicable
Vermin Control	Control method specified	yes 🖂	no	not applicable
je od socialne udo og kale <b>sem</b> onde	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 schematics as appropriate.

For each Emission Point identified complete Table F.1 of the Annex, and include detailed descriptions and schematics 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 **Attachments 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 <u>must</u> 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.

#### F.2 Air

- to include Dust, Odour

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

# F.6 Noise

F.6 Noise	2	ny any other ne	ું. જ
Monitoring Arrangements specified	yes 🔀	<sup>soi</sup> no _	not applicable
Monitoring points identified, (plus 12-figure grid references)	yes Sto	no	not applicable
Attachment included	yes 🖂	no	not applicable

# F.7 Meteorological Data

Monitoring Arrangements specified	yes 🗌	no	not applicable⊠
Monitoring points identified, (plus	yes 🗌	no	not applicable $oxtime $
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 12-figure grid references)	yes 🗌	no 🗌	not applicable
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 / utilisation plants

plants	<u> </u>		Ų		
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	<del></del>		<del></del>		
Particulates					
TA Luft Class I, II, III organics			7.*		
Hydrochloric acid Hydrogen Fluoride					
Trydrogen Puoride	<del></del>		de	<u> </u>	<u> </u>
Table F.9(b) Landfill		ose officially			
ing Addisonal Control of the Control		outpose ed !			Section 18
	Gas horeholes / Faci	ity Office			
	vents/ wells/ perimeter locations	Anti-			
	locations of stige				
Methane (CH <sub>4</sub> ) % v/v	COD.				
Carbon Dioxide (CO <sub>2</sub> ) % v/v					
Oxygen (O <sub>2</sub> ) % v/v	Conscr				
Atmospheric Pressure					
Temperature					
-	- Le announce de la constant de la c				
Table F.9 (c) Landfill					
Mark grown					
Gas Collection System					
Con Control Statem			+		
Gas Control System			<del>                                     </del>		
					<u></u>
Monitoring Arrange	ements specified	yes 🗌 🛮 n	o not	applicable	
Monitoring points is	dentified, (plus	yes 🔲 🛮 n	o not	applicable_	] [
12-figure grid refero					
Attachment include	d	ves n	o not	applicable	$\Pi$

# 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 A collection	not applicable	
	For its tho		



# 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 OF ACTIVITY APPLIED FOR

	nagement Act Disposal) Activities		nagement Act ecovery) Activities
Class of Activity Applied For	Quantity (tpa)	Class of Activity Applied For	Quantity (tpa)
Class 1	Parabor and long accounted senters of back and an infection contraction	Class 1	Andrea Sarahan
Class 2		Class 2	Met
Class 3		Class 3	40
Class 4		Class 40 co	
Class 5		Class 50	
Class 6		Class 6	
Class 7		Glass 7	
Class 8		Class 8	
Class 9	40	Class 9	
Class 10	700	Class 10	
Class 11	ુ હોં	Class 11	
Class 12	asent	Class 12	
Class 13	Cor	Class 13	

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.

TABLE H.1(B) ANNUAL QUANTITIES AND NATURE OF WASTE

Year	Non-hazardous waste (tonnes per annum)	Hazardous waste (tonnes per annum)	Total annual quantity of waste (tonnes per annum)
2001	13,633	2*	13633
2002	30,407	-	30407
2003	40,712	-	40,712
2004	50,491	-	50,491
2005	80,000	-	80,000
2006	95,000	-	95,000
2007	95,000	-	95,000

Hazardous Waste included batteries, fluorescent lamps only.

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).

WASTE TYPE	TONNES PER ANNUM (existing)	TONNES PER ANNUM (proposed)	TOTAL (over life of site) tonnes
Household	21853 RECHT	88000	190,000
Commercial	8960 For High	20000	100,000
Sewage Sludge	0 dicar		
Construction and Demolition	10565 Consens	23750	118,750
Industrial Non-» Hazardous Sludges	0		
Industrial Non- Hazardous Solids	8566	15000	75,000
Hazardous *(Specify detail in Table H 1.2)	0		
Inert Waste imported for restoration purposes			त्री व्यक्तः "क्यांस्कृतिकी व्यक्ति हार्या हो गोर्वनः प्रकारम्थानको स्वाहः स्वयंत्रः भिन्नाः प्रयानकः ह्रवाननी

LIFETIME CALCULATION BASED ON 5 YEARS

#### \* 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		7777			
Batteries	20 01 20	<2	<2		
Fluorescent Light Bulbs	20 01 21	<0.5	<0.5		
Contaminated Soils					
OTHER HAZARDOUS WASTE (APPLICANT TO SPECIFY)					
	eg.				

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 completed:

#### H.3a Waste Handling at the Landfill Facility

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 16/07/06 to 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 year 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(ii) of the application form. Applicants should also provide conversion factors used to relate volume (m³) and tomage (t) for their waste stream.



#### SECTION 1 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.

Refer to Section 2.1 of EIS

#### 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.** 

Refer to Section 2.4 of EIS



#### 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.** 

Not applicable

#### 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.

Refer to Section 2.4 of EIS

## 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, plans, drawings, documentation, including containment engineering, remedial works, and any other supporting information should be included in **Attachment I.5**.

Refer to Section 2.3 of EIS

#### 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)



- (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, maps, diagrams and supporting documents, including details of noise attenuation and noise proposed control measures to be employed, should form **Attachment I.6** 

Refer to Section 2.5 of EIS

#### 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* 

Refer to Section 2.5 of EIS

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## 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 🔀	no	not applicable
		S	lige.
	ور در	only any othe	
	action purpos	jet.	
Fortige Confi	ight on	only any other	

# 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

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#### 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.

Attachment included	yes 🖂	no	not applicable

#### L.2 Fit and Proper Person

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	ves 🖂	no	not applicable
1 Little Million Children	J 00 2 3	***V	Trot abbitcapic



## 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 have no objection to the provision by the Agency or local authority of a copy of the application or parts thereof to any person.

Signed by: TRuncis	2	D
signed by	- ruin ~	Da
(on behalf of the organisation)	/	

Date: 29 H March 2005

Print signature name: FRANCIS FLYNN

Position in organisation: General Managen

Company stamp or seal:

Company Stamp or Seal:

Company Stamp or Seal:



## **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 G	AS FLARE	<b>EMISSIONS</b>	TO ATMOSP	HERE
<b>Emission Point:</b>					

Emission Point Ref. Nº:						
Location:						
Grid Ref. (12 digit, 6E,6)	N):		~e·			
Vent Details		other	III			
Diamete	er:	ses of for any		,		
Height above Ground(n	n): tion put	oses only any other equired for any other				
Date of commencement emission:	of Fortight of					
Characteristics of Emiss	sion :			mg/m <sup>3</sup>		
Total organic carbon (TO	<b>C</b> )			mg/m <sup>3</sup>		
NOx		0°C. 3% (	)2(Liquid or Gas), 6%	mg/Nm³ 6 O₂(Solid Fuel)		
Maximum volume of er	nission			m³/hr		
Temperature	o <sub>(</sub>	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 (av	/g)	min/hr	hr/day	day/yr		



(ii)

Temperature

Other factors

For Combustion Sources:

Volume terms expressed as:

COL

°C(max)

## WASTE Application Form

TABLE E.1(ii) MAIN EM	IISSIONS TO ATMOSPHERE (1 Page for each emissi	ion <sub>l</sub>
Emission Point Ref. №:		
Source of Emission:		
Location:		
Grid Ref. (12 digit, 6E,6N):		
Vent Details Diameter:		
Height above Ground(m):		
Date of commencement:		
Characteristics of Emission	otteruse.	
(i) Volume to be emitted	l: \square \square  \text{q} \text{for } \text{d} \text{For } Fo	
Average/day	m³/d Maximum/day m³/d	
Maximum rate/hour	Min efflux velocity m.sec <sup>-1</sup>	

(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):

 $\square$  wet.

°C(min)

 $\square$  dry.

Periods of Emission	(avg)	min/hr	hr/dav	day/yr
	(4.8)			

°C(avg)

 $%O_{2}$ 



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	eatment <sup>(1)</sup>	· .	Brief			As disc	harged <sup>(1)</sup>	- 4	
÷	mg/	Nm <sup>3</sup>	kg	g/h	description	mg/	Nm <sup>3</sup>	kg	g/h.	kg/	year
	Avg	Max	Avg	Max	of treatment	Avg	Max	Avg	Max	Avg	Max
				Consent	Rection by the required for 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	
Recycling Plant Building	Waste acceptance handling and processing	Dust/debris	on purpose sold	and other tise.		Waste is processed though the system as efficiently as possible. Fine wastes are removed from the recycling plant building. The floor is clean every evening after operations cease.  Nuisance inspections are carried out daily.
Road ways	Movement of vehicles	Dust For inspect	or purificult			Roadways are clean three times a week by street cleaner; Speed limits on site for traffic movement; Water sprinkler system is used during periods of dry weather periods.
Skip Storage Areas	Storage of Skips	Debris Cons				Skips are removed of debris prior to being stored outside of the recycling plant building
Glass Segregation Areas	Storage of waste glass	-	,			Nuisance inspections are carried out daily; Any dust/debris generated from the site will be removed.
Composting Unit	Handling of Composted material after harvesting	Dust	·		·	Nuisance inspections are carried out daily;

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

<sup>2</sup> 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.

	SIONS TO S ge for each emi	SURFACE WATI	ERS				
Emission Point:							
Emission Point Ref. Nº:							
Source of Emission:							
Location:							
Grid Ref. (10 digit, 5E,5N):				14700 4550 74			
Name of receiving waters:							
Flow rate in receiving waters:				Dry Weather Flow 13.sec <sup>-1</sup> 95%ile flow			
Available waste assimilative capacity:		es 11 any other use.		kg/day			
Emission Details:	Section Park	oses ed filt					
(i) Volume to be emitte	deor kitage						
Normal/day Consett	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/hr	_hr/day	day/yr			



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

Emission point reference number:

Parameter		Prior to t	reatment			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	
				Bush of coldinary	on the red red red red red red red red red re				

## ${\it WASTE\ Application\ Form}$

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

Emission Point:			
Emission Point Ref. N	<u> </u>		
Location of connection sewer:	ı to		
Grid Ref. (10 digit, 51	,5N):		
Name of sewage under	taker:		
Emission Details:			
(i) Volume to be e	mitted		
Normal/day	$m^3$	Maximum/day (	$m^3$
Maximum rate/hour	$m^3$	क्ट वर्षभं कार्य	
including daily	or seasonal vari	emissions are made, or arations (start-up /shutdown	re to be made, n to be included):
Periods of Emission (	avg) pri	min/hrhr/da	yday/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	TO TAIL TO SEE		As discharged	1 (5) 4 (4)		% 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	
					Walter Strate Control of the Control				



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

## **Emission Point or Area:**

Emission Point/Area Ref. Nº:	GWE1
Emission Pathway: (borehole, well, percolation area, soakaway, landspreading, etc.)	Soakaway
Location:	North-west corner of site
Grid Ref. (10 digit, 5E,5N):	28675 26989
Elevation of discharge: (relative to Ordnance Datum)	-
Aquifer classification for receiving groundwater body:	Poor Aquifer which is generally unproductive except for local zones (Pl)
Groundwater vulnerability assessment (including vulnerability rating):	Extreme - High
Identity and proximity of groundwater sources at risk (wells, springs, etc):	Groundwater Supply Well located within Kilsaran
Identity and proximity of surface water bodies at risk:	No surface water bodies within the vicinity of the site

#### **Emission Details:**

(i) Volume to be emitted (based on Rainfall Figures for Mullingar Weather Station)							
Normal/day 24 m³ Maximum/day 745 m³							
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/hr	hr/day	day/yr
`			•



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

Source	Emission point Ref. No	Equipment Ref. No	Sound Pressure <sup>1</sup> dBA at reference  distance		Soun	d Press	Octav ure¹ Lev	e bands (F els dB(unv	Iz) veighted	l) per b	and		Impulsive or tonal qualities	Periods of Emission
				315	63	125	250	500	1K	2K	4K	8K		9 (45)
Trommels	A2 & A1,	10	76dB at 20m								4			8 hrs day
Bobcat operator Forklift	A2, A3, A4, & A5	4 & 5	78.6 dB at 1m			/								
Volvos & Hitachi & grab	A2	6&7	90 dB at 1m				A State	ise.						
Shredder	A1 & A2	9	90dB at 1m			Sold of the state	O. O.				* 2			
	The second secon			2012 TA 10 2013 TA 10 2013 TA 10 2013 TA 10	OI P	rediff								
				Je	SCO WILL					/				
				(00)										
			_o®	ZIL O										

<sup>1.</sup> For items of plant sound power levels may be used.



## TABLE F.1: ABATEMENT / TREATMENT CONTROL

Emission point reference number : <u>GWE (Groundwater Emission)</u>

Control <sup>1</sup> parameter	Equipment <sup>2</sup>	Equipment maintenance	Equipment calibration	Equipment back-up
Suspended solids	Siltration tank	Cleaned annually	N/A	N/A
hydrocarbons	Oil interceptor	Cleaned biannually	N/A	N/A

Control <sup>1</sup> parameter	Monitoring to be carried out <sup>3</sup>	Monitoring equipment	Monitoring equipment calibration
		outher only and	
	io io	settomet.	

<sup>1</sup> List the operating parameters of the treatment / abatement system which control its function.
2 List the equipment necessary for the proper function of the abatement / treatment system.
3 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)

Emission Point Reference No(s). : GWE (groundwater Emission

Parameter	Monitoring frequency	Accessibility of Sampling Points	Je.
Visual Inspection	Quarterly	Good	only, any other use.
		<u> </u>	only an,
		of the di	



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

Monitoring Point Reference No: Dust (D1, D2, D3, D4)

Parameter	Monitoring frequency	Accessibility of Sampling point	
Dust Depositional Dust Directional	Three times per Annum (twice during summer Months)	Good Food Constitution of Consent	all poses only any other use all the poses of the poses of the post of the pos



Monitoring Point Reference No: Noise (N1, N, N3, N4, N5 NSL (GAA pitch) NSL (Nearby Housing)

Parameter	Monitoring frequency	Accessibility of Sampling point
L (A) <sub>EQ</sub> (30 mins) L (A) <sub>10</sub> (30 mins) L (A) <sub>90</sub> (30 mins) Frequency Analysis (1/3	Annually	Good
Octave Band Analysis)		Consent of contribution



Monitoring Point Reference No: Groundwater (GW1) Kilsaran Well

Parameter	Monitoring frequency	Accessibility of Sampling point	
pH, Temperature,	Annually	Good	
Conductivity, DO,			
Ammonia, Boron,			
Barium, Cadmium,			
Calcium, Chloride,			
Chromium, Copper, Iron,			14.
Lead, List I/II organic			s offici
substances, Magnesium,		Consent of convitable of	Jose Jed 1
Manganese, Mercury,			OHIY CHILL
Nickel, Potassium,		idos	of to
Sodium, Sulphate, TOC,		ge <sup>C</sup> of	
TON, TPH, Total		x in all	
Phosphorus /		FO DALL	
orthophosphate, Zinc		\$00,	
Total Coliforms		ant. C	
Faecal Coliforms		~ Onse	
		·	
		•	
•			

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

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
	Automotive Gas Oil –	See	Harmful - Xn	13500L	275,000	Fuel	R40	S43,S24,
		MSDS			L			S2, S46
		sheet			1000100		D 40	G 40 G04
		~~~	Harmful - Xn	4500L	100,000	Fuel	R40	S43,S24,
	Diesel	MSDS		only.	<b>D</b>			S2, S46
		sheet		- moses ato				
	GEM Multi-gear Oil			200	I -	Gear Lubrication		
	GEM super –		Xi 💮	800L	1800 L	Engine Oil	R38,	
	Diesel Engine Oil		Al ginspection				R41	
	GEM Hydraulic Oil		got itight	1200L	2250L	Hydraulic Systems Oil		

Notes:

In cases where a material comprises a number of distinct and available dangerous substances, please give details for each component substance. c.f. Article 2(2) of SI Nº 77/94 c.f. Schedules 2 and 3 of SI Nº 77/94

2.

3.



TABLE H.1(i): WASTE

**Hazardous Waste Recovery/Disposal** 

Waste material	EWC Code	Main source <sup>1</sup>	Qu Tomes / month	m <sup>3</sup> / month	On-site Recovery/Disposal (Method & Location)	Off-site Recovery, reuse or recycling (Method, Location & Undertaker)	Off-site Disposal (Method, Location & Undertaker)
			Consen of confriction	Purpose lede			

<sup>1</sup> 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>	Quar	ıtity	On-site recovery/disposal <sup>2</sup>	Off-site Recovery, reuse or recycling	Off-site Disposal
			Tonnes / month	m³/month	(Method & Location)	(Method, Location & Undertaker)	(Method, Location & Undertaker)
	Property of the Control of the Contr						
					, No. 1		
1 A reference she	ould be made to the	main activity/ proce	ss for each waste	20° 03°			
2 The method of	disposal or recover	y should be clearly d	lescribed and reference	ced to Attachment	H.1		
				of cold			
			Cati	sent			
			Co				

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

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

Parameter		Contract Contraction Contract Co. At 1974	sults ig/l)		Sampling method <sup>2</sup> (grab, drift	Normal Analytical Range <sup>2</sup>	Analysis method / technique
	Date	Date	- Date	Date	etc.)		
pH	17.0.27				net us		
Temperature					- A · of oth		
Electrical conductivity EC					softor air.		
Ammoniacal nitrogen NH <sub>4</sub> -N					500 ited to		
Chemical oxygen demand					Tedy.		
Biochemical oxygen demand				CCITANT COLOR			
Dissolved oxygen DO				institu			
Calcium Ca				to dil			
Cadmium Cd				a of o			
Chromium Cr			1715	,			
Chloride Cl			0				
Copper Cu							
Tron Fe							
Lead Pb			_				
Magnesium Mg							
Manganese Mn							
Mercury Hg							



Surface Water Quality (Sheet 2 of 2)

Parameter	The Control of the Co	10 10 11 21 21 24 1 1 1 1 1 1 1 1 1 1 1 1 1 1	esults ng/l)		Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
Nickel Ni							
Potassium K						·	
Sodium Na							
Sulphate SO <sub>4</sub>							
Zinc Zn					her it		
Total alkalinity (as CaCO <sub>3</sub> )					14. 04 of		
Total organic carbon TOC					20160, 91		
Total oxidised nitrogen TON					120 sized		
Nitrite NO <sub>2</sub>					Jeon		
Nitrate NO <sub>3</sub>				Oection W			
Faecal coliforms (/100mls)				insight			
Total coliforms (/100mls)				tic opyt			
Phosphate PO <sub>4</sub>				alof "			



Table I.4(i) GROUNDWATER QUALITY (Sheet 1 of 2) Monitoring Point/ Grid Reference:

Parameter			Results			Sampling	Normal	Analysis
			(mg/l)			method (composite etc.)	Analytical Range	method / technique
	2/2002	7/2002	4/2003	11/2003	2004			
pH	7.6	7.4	7.3	7.4	7.4	Тар	1-14	G/05
Electrical conductivity EC	813	809	722	849	822	Тар	<1	G/06
Ammoniacal nitrogen NH <sub>4</sub> -N	<0.2	_	0.01	< 0.02	<0.02	Тар	<0.02	G/02
Calcium Ca	111	70	133	161	172	Tap	<0.1	ICP-MS
Cadmium Cd	-	< 0.001	<0.1	<2	<2	Tap	<2	ICP-MS
Chromium Cr	<2	< 0.01	0.018	<2	<2	o Tap	<2	G/30
Chloride Cl	24.9	23	23	28.4	304.00	Тар	<0.5	G/39
Copper Cu	<2	0.014	22	3	es of foi t	Тар	<2	G/09
Iron Fe	<0.1	<0.5	0.131	0.3	<b>30.3</b>	Tap	<0.1	G/27
Lead Pb	<2	< 0.01	≼1	<2 .019 18	<2	Тар	<2	GFAA
Magnesium Mg	39			3600 outle	45	Тар	<0.1	ICP-MS
Manganese Mn	24	0.169	۵۵.	26	4	Tap	<0.04	G/28
Mercury Hg	<1	-		o <b>₹</b> 1	<1	Тар	<1	ICP-MS
Nickel Ni	<2	<0.01	22	3	<2	Тар	<2	G/29
Potassium K	2.3	2.6	2.40050	1.7	1.6	Тар	<0.1	ICP-MS
Sodium Na	17	17	17	16	21	Tap	<0.1	ICP-MS

G/BASED ON APHA,  $1998, 20^{TH}$  ED,



## GROUNDWATER QUALITY (SHEET 2 OF 2)

Parameter	Results (mg/l)					Sampling method (composite, dipper etc.)	Normal Analytical Range	Analysis method / technique
보다 기계에 가장하다 보다 보는 것이 되었다. 이번 경기 때문에 되었다. 보다 그 것 같습니다. 보다 보다는 것이 되었다. 것이다.	Date	Date	Date		Date			
Phosphate PO <sub>4</sub>			< 0.005	<0.16	< 0.02		<0.02	G/39
Sulphate SO <sub>4</sub>	48.5	48	48	52.3	44.5			
Zinc Zn	4	0.04	8	<2	10		<2	G/10
Total organic carbon TOC	<5	_		42	<5		<5	
Total oxidised nitrogen TON	-	0.304				χę.		
Arsenic As	-	<0.01	<0.001			their	<0.01	ICP-MS
Barium Ba	24	-	236	178	264	14. org	<2	ICP-MS
Boron B	14	<0.5	<50	37	20	foi	<0.5	ICP-MS
Selenium Se		< 0.01	< 0.001		urpos tire		<0.01	ICP-MS
Silver Ag	-	<0.5	<0.05		ion Prieds		<0.05	ICP-MS
Nitrite NO <sub>2</sub> -N	< 0.03			<0.03	<b>₹</b> 0.02		<0.02	IC
Nitrate NO <sub>3</sub> -N	0.2			0.27	0.2		<0.2	G/39
Faecal coliforms (/100mls)	<10		# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<1 %			<1	
Total coliforms (/100mls)	<10			J.P			<1	