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Waste Management Licensing, **EPA** Headquarters Johnstown Castle Johnstown Co Wexford

27th of June 2012

Waste Licence Application for a Mechanical Biological Treatment (MBT) Re: Facility in the townlands of Coolcarrigan and Drummond, Carbury, County Kildare.

Dear Sir/Madam, On behalf of our client Bord na Móna Pter please find attached a Waste Licence Application and accompanying Environmental Impact Statement for a Mechanical Biological Treatment (MBT) Facility with a capacity of 250,000 tonnes per annum (tpa) of waste (principally municipal solid waste) on a 29Ha site in the townlands of Coolcarrigan and Drummond, Carbury, County Kildare.

The Waste Licence Application for the proposed MBT Facility has been prepared such that it provides for the development of an optional Dry Anaerobic Digestion step as part of the biological treatment stage. This approach has been subject to preapplication discussions with the EPA. Please refer to Section 1.2 of Volume II of the accompanying EIS for further information on this approach.

The Waste Licence Application, in hardcopy (1 No. signed original and 2 No. copies) and digital format (2 No. copies) 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 (1 No. signed original and 2 No. copies) and digital format (16 No. copies) 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.

Directors: L.E. Waldron (Chairman) R.F. Tobin (Managing Director) B.J. Downes M.F. Garrick J.P. Kelly S. Finlay P. J. Fogarty D. Grehan E. Connaughton (Company Secretary) M. McDonnell C. McGovern B. Mulligan C.O'Keeffe

Associates: T. Cannon P. Cloonan D. Conneran B. Gallagher B. Heaney M. Hogan B. Hutchinson D. Kennedy E. McPartlin S. Tinnelly

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



We have also included a cheque from Bord na Móna Plc. for €30,000 in respect of the application fee.

Yours sincerely,

Grehan men Damien Grehan

TOBIN Consulting Engineers

Consent of copyright owner control for any other use.



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 2011.

Environmental Protection Agency P.O.Box 5000, Johnstown Castle Estate, County Wexford Telephone: 053-60600 Fax: 053-60699



WASTE Application Form

Environmental Protection Agency Application for a Waste Licence

WASTE MANAGEMENT ACTS 1996 to 2003

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ANNEX 1: STANDARD FORMS

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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,

| LOCATION | Attachment | A alle | 5 |
|----------|------------|--------|----------|
| CHECKED | Applicant | ATS MY | Official |

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

| | A ^C | |
|----------|----------------|----------|
| LOCATION | Attachment A | |
| CHECKED | Applicant 🔀 | Official |
| | A | |

(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 | |
|----------|--------------|----------|
| CHECKED | Applicant 🔀 | 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,

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| 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 Act¹ 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 | A | .9.* | |
|----------|------------|-----------|----------|--|
| CHECKED | Applicant | \square | Öfficial | |
| | | | XY | |

(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 |
| | dy. | |

(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 |

¹ Note that the Third and Fourth Schedules of the Act were amended by the European Communities (Waste Directive) Regulations, 2011.

 (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 E | |
|----------|--------------|----------|
| CHECKED | Applicant 🔀 | Official |

 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 | Attachment I | |
|----------|--------------|----------|
| 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 | Attachment F | |
|----------|---------------|-----------------|
| CHECKED | Applicant 📈 🔀 | Official |
| | the office | |

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

| 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 🛛 | 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 J, C.2, E and I | |
|----------|----------------------------|----------|
| 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 and K | |
|----------|--------------------|----------|
| CHECKED | Applicant 🔀 | 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 | Ø fficial |
| | an ^c | et al. |

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

| LOCATION | Not Applicable | |
|----------|---|----------|
| CHECKED | Applicant | Official |
| | FOT IT ISTE | |
| | × · · · · · · · · · · · · · · · · · · · | |

(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 | Attachment A | |
|----------|--------------|----------|
| CHECKED | Applicant | 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 | 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 B.6 | |
|----------|----------------|----------|
| CHECKED | Applicant 🛛 | Official |

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

| LOCATION | Attachment B.6 only and | |
|----------|-------------------------|----------|
| CHECKED | Applicant X | Official |

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

| LOCATION | Attachment B.6 | |
|----------|----------------|----------|
| CHECKED | Applicant 🛛 | Official |
| °C | JII5 | |

(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 B.6 | |
|----------|----------------|----------|
| CHECKED | Applicant 🔀 | Official |

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

| LOCATION | Attachment E | |
|----------|--------------|----------|
| CHECKED | Applicant 🛛 | 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 | \square | 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 | Υ |
|----------------------------------|--------------------------|
| CHECKED | Applicant 🛛 💉 Official 🗌 |
| | ally any |
| CD OF PDF FILES PROVIDED? Y/N | Y Set d for |
| CHECKED | Applicant 🔀 Official 🗌 |
| .10 | Sectowite. |

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 of CD-ROM should accompany this application.

| EIA REQUIRED ? Y/N | γ | | | |
|--|-----------|-----------|----------|--|
| CHECKED | Applicant | \square | Official | |
| 3 HARD COPIES OF EIS INCLUDED ? Y/N | Υ | | | |
| CHECKED | Applicant | \square | Official | |
| 16 CD versions of EIS, as PDF files, PROVIDED? Y/N | Y | | | |
| CHECKED | Applicant | | 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**



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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>
- 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. epa

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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 required for any other use.

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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 5979 |
| Fax: | 057 – 934 5160 |
| | |

* 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 only any |
|----------|--|
| Address: | TOBIN Consulting Engineers |
| | Block 10-4 |
| | Blanchardstown Corporate Park |
| | Blanchardstown, Dublin 15 |
| Tel: | (01) 8030401 for your and the second se |
| Fax: | (01) 8030410 s ^c |
| e-mail: | damien.grehan@tobin.ie |

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

| Address: | Bord na Móna Plc. |
|----------|-------------------|
| | Main Street |
| | Newbridge |
| | County Kildare |
| Tel: | (045) 439000 |
| Fax: | (045) 439001 |
| 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 | |
| Prospective Purchaser | |
| 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: | | Ø)• | |
| | | A Hee. | |

Name and address of the current* 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 ($\leq A3$) showing the above details should be included in Attachment B1.

' :Ś

| Name: | Not Applicable | ton purche |
|--------------|----------------|----------------|
| Address: | | Ster Oatt |
| | | COL THE REPORT |
| | | 2 color |
| | | at of |
| Tel: Fax: | | COLSE |
| Fax: | | 0 |

e-mail:

epa

*Current at the time the application is submitted

B.2 Location of Activity

| Name: | Drehid Mechanical Biological Treatment (MBT) Facility | | |
|--------------|---|--|--|
| Address*: | *: Coolcarrigan, Drummond | | |
| | Carbury | | |
| | County Kildare | | |
| | | | |
| Tel: | Not available at this time | | |
| Fax: | Not available at this time | | |
| e-mail: | Not available at this time | | |
| * Include an | y townland | | |

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| National Grid Reference | E2746 N 2305 |
|-------------------------|--------------------------------------|
| (8 digit 4E,4N) | (Note: located at the |
| | Administration and Welfare 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: | Planning Department |
| | Áras Chill Dara |
| | Devoy Park |
| | Naas, Co Kildare |
| Tel: | (045) 980845 |
| Fax: | (045) 980240 |

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 potified | Yes 🔀 |
|-----------------------------|-------|
| ction retre | No |
| | |

Planning Permission relating to this application

| has been obtained | | anto |
|------------------------|-----------|--------|
| is being processed | \square | conser |
| is not yet applied for | | U |
| is not required | | |

| Local Authority Planning | An Bord Pleanála Reference |
|---------------------------------|----------------------------|
| File Reference N ^o : | PL 09.PA0027 |

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 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

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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: | Use of licensed treatment facilities |
|----------|---|
| Address: | Refer to correspondence with facilities in Attachment B4. |
| | |
| | |
| | |

Tel:

Fax:

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 🖂 |
|---------------------|-----|------|
|---------------------|-----|------|

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

| | | Order |
|----------|-------------------------|--------------|
| Name: | HSE Dublin Mid Leinster | and the |
| Address: | Oak House, | Purchur |
| | Limetree Avenue | action net t |
| | Millennium Park, Naas | HS ALO |
| Tel: | 045 880 400 | FORVIE |
| Fax: | 1890 200 857 | 5 C |
| | C OFF | sh |

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

epa

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 20010, as amended by the European Communities (Waste Directive) Regulations, 2011, 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 2010

| | Waste Management Acts 1996 to 2010 | | | | | |
|-----|--|-----------------------------|-----|---|---|--|
| | Third Schedule Waste Disposal Operations | Y/N | | Fourth Schedule Waste Recovery Operations | | |
| D 1 | Deposit into or on to land (e.g. including landfill, etc.). | N Hasectico Rytight O | R 1 | Use principally as a fuel or other means to generate energy: This, includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above: | N | |
| D 2 | Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.). | N | R 2 | Solvent reclamation/regeneration. | N | |
| D 3 | Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.). | N | R 3 | Recycling /reclamation of organic substances which are not used as solvents (including composting and other biological transformation | Р | |



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| | | | | processes), which includes gasification and pyrolisis using the components as chemicals. | |
|------|---|---------------------|-------------|--|---|
| D 4 | Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.). | N | R 4 | Recycling/reclamation of metals and metal compounds. | Y |
| D 5 | Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.). | N | R 5 | Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials. | Y |
| D 6 | Release into a water body except seas/oceans. | Ν | R 6 | Regeneration of acids or bases. | Ν |
| D 7 | Release to seas/oceans including sea-bed insertion. | Ν | R 7 | Recovery of components used for pollution abatement. | Ν |
| D 8 | Biological treatment not specified elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12. | Y | R 8 | Recovery of components from catalysts. | N |
| D 9 | Physico-chemical treatment not specified elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcinations, etc.). | N | R 9 | Oil re-refining or other reuses of oil. | N |
| D 10 | Incineration on land. | Ν | R 10 | and treatment resulting in benefit to agriculture or secological improvement. | Ν |
| D 11 | Incineration at sea (this operation is prohibited by EU legislation and international conventions). | N v | R the count | Use of waste obtained from any of the operations numbered R 1 to R 10. | N |
| D 12 | Conventions). Permanent storage (e.g. emplacement of containers in a mine, etc). | Priette Pyriette | R 12 | Exchange of waste for submission to any of the operations numbered R 1 to R 11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11). | Y |
| D 13 | Blending or mixing prior to submission to any of the operations numbered D 1 to D 12 (if there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, amongst others, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D1 to D12). | Y | R 13 | Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section $5(1)$), pending collection, on the site where the waste is produced) | Y |
| D 14 | Repackaging prior to submission to any of the operations numbered D 1 to D 13. | Y | | | |
| D 15 | Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the 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) | 250,000 |
|------------------------------|---------|
| Year | 2015 |

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 | 20,000 |
| disposal activity $1.1 - 3.3$) | |
| Recovery of Waste (4) | 10,000 |
| | 30,000 |

TABLE B.7.4 (FOR A LANDFILL APPLICATION)

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

| ASY O | |
|--------------------------------------|--|
| (a) landfill for hazardous waste | |
| (b) landfill for non-hazardous waste | |
| (c) landfill for inertwaste | |
| | |

Not Applicable - This is not a Landfill Application

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.

| | Regulations Apply | 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**.

Consent of copyright owner required for any other use.

| Name | Position | Duties and Responsibilities | Experience /Qualifications |
|--|---|--|--|
| To be appointed prior to activity commencement | Facility Manager | Overall management and responsibility for the operation and maintenance MBT Facility | Engineering degree or equivalent |
| To be appointed prior to activity commencement | Environmental Engineers/Scient ists | Responsibility for environmental compliance of the MBT Facility | Engineering/Science degree |
| To be appointed prior to activity commencement | Maintenance Engineers | Responsibility for overall maintenance of the MBT Facility | Engineering degree |
| To be appointed prior to activity commencement | Mechanical Treatment Process Supervisors | Overall supervision of the mechanical treatment process | Training in waste management |
| To be appointed prior to activity commencement | Biological Treatment Process Supervisors | Overall supervision of the set biological treatment process | Training in waste management |
| To be appointed prior to activity commencement | Refining and ABP Hygienisation Process Supervisors | Overall supervision of the refining and ABP hygienisation process | Training in waste management |
| To be appointed prior to activity commencement | Logistics Manager | Management and organisation of the transport of outputs to end destinations | Training in waste management |
| To be appointed prior to activity commencement | Weighbridge Operator | Waste acceptance Operation of weighbridge | Training in EPA waste acceptance procedures |
| To be appointed prior to activity commencement | Machine Operators | Waste handling for the MBT Facility | Training in operation of on- site machinery |
| To be appointed prior to activity commencement | Maintenance Technicians | Execution of preventative maintenance programmes and emergency maintenance tasks | Appropriate mechanical and electrical trade qualifications |
| To be appointed prior to activity commencement | General Operatives | General maintenance and repairs, quality control, cleaning etc. | |

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 | Y | See Attachment D1 |
| D.1. b | Designs for site roads | Y | See Attachment D1 |
| D.1.c | Design of hardstanding areas | Y | See Attachment D1 |
| D.1.d | Plant | Y | See Attachment D1 |
| D.1.e | Wheel-wash | ۲ ق | See Attachment D1 |
| D.1.f | Laboratory facilities | Y | See Attachment D1 |
| D.1.g | Design and location of fuel storage areas | Υ | See Attachment D1 |
| D.1.h | Wheel-wash Laboratory facilities Design and location of fuel storage areas Waste quarantine areas Waste inspection areas citon reference | Υ | See Attachment D1 |
| D.1.i | Waste inspection areas | Υ | See Attachment D1 |
| D.1.j | Traffic control | Υ | See Attachment D1 |
| D.1. k | Sewerage and surface water drainage infrastructure | Υ | See Attachment D1 |
| D.1.l | All other services conserv | Y | See Attachment D1 |
| D.1.m | Plant sheds, garages and equipment compound | Υ | See Attachment D1 |
| D.1. n | Site accommodation | Y | See Attachment D1 |
| D.1. 0 | A fire control system, including water supply | Υ | See Attachment D1 |
| D.1.p | Civic amenity facilities | Ν | Not Applicable |
| D.1.q | Any other waste recovery infrastructure | Υ | See Attachment D1 |
| D.1.r | Composting infrastructure | Υ | See Attachment D1 |
| D.1. s | Construction and Demolition waste infrastructure | Ν | Not Applicable |
| D.1.t | Incineration infrastructure (if applicable). Provide information to fulfil A uticle $A(2) $ & (3) of the | N | Not Applicable |
| | Provide information to fulfil Article 4 (2) & (3) of the Incineration of Waste Directive | | |
| D.1. u | Any other infrastructure | Ν | Not Applicable |



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 | | no | not applicable |
|---------------------|-------|----|----------------|
| Attachment included | yes 🔼 | no | not applicable |

LANDFILLS

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

| | ional projects. | | | | |
|-------|--|-----|----------------|--|--|
| TABLE | TABLE D.3 LINER SYSTEM | | | | |
| | Fortight | y/n | Comments | | |
| D.3.a | D.3 LINER SYSTEM For inspection of the second state of the second | N | Not Applicable | | |
| D.3.b | What type of liner system is specified? | N | Not Applicable | | |
| D.3.c | Has a Quality Control Plan been specified? | N | Not Applicable | | |
| D.3.d | Has a Quality Assurance Plan been specified? | N | Not Applicable | | |
| D.3.e | Have independent, third-party supervision, testing and controls been specified? | N | Not Applicable | | |
| D.3.f | Have basal gradients for all cells and access ramps to the cells been designed? | N | Not Applicable | | |
| D.3.g | Has a leak detection survey been specified? | N | Not Applicable | | |



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 |
|---------------|---|-----|----------------|
| | | Ν | Not Applicable |
| D.4. a | Is there a Leachate Management Plan? | | |
| | | Ν | Not Applicable |
| D.4. b | Have annual quantities of leachate been calculated? | | |
| | | Ν | Not Applicable |
| D.4. c | Has the total quantity of leachate been calculated? | | |
| | | Ν | Not Applicable |
| D.4.d | Have the size of the cells been specified taking account of the water balance calculations? | | |
| | account of the water balance calculations: | | |
| D.4.e | Has a leachate collection system been specified | N | Not Applicable |
| D.4.C | Thas a reachate conection system been specifiete | | |
| D.4.f | Has a leachate storage system been specified? | N | Not Applicable |
| | of tot | N | Not Applicable |
| D.4.g | Has a system for monitoring the level of leachate in | | |
| | the waste been designed? | | |
| | - Occurrent C | Ν | Not Applicable |
| D.4. h | Is leachate recirculation proposed/practised? | | |
| | FO. Mrs. | Ν | Not Applicable |
| D.4.i | Has leachate treatment on-site been specified? | | |
| | N ^S CIT | Ν | Not Applicable |
| 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

| | .5. Lanutin Gas Management | y/n | Comments |
|------|---|----------------|------------------|
| D.5a | Is there a Landfill Gas Management Plan? | N | Not Applicable |
| | 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? | N | Not Applicable |
| D.5c | Does the passive system cover all of the filled area? | Ν | Not Applicable |
| D.5d | Have gas alarm systems been installed in the site buildings? | N | Not Applicable |
| D.5e | Have measures been installed to prevent landfill gas migration (e.g. barriers)? | N any other | ,∯iot Applicable |
| D.5f | Has a time-scale been proposed for the installation of landfill gas in the infrastructure? | N | Not Applicable |
| D.5g | Is gas flaring undertaken at the site? | Ν | Not Applicable |
| D.5h | Is there an active (i.e., pumped) landfill gas extraction system? | N | Not Applicable |
| D.5i | Does the active system cover all of the filled area? | Ν | Not Applicable |
| D.5j | Is landfill gas used to generate energy at the site? | N | Not Applicable |
| D.5k | Have emissions from the flare stack and utilisation plant been assessed for source, composition, quantity and level and rate? | N | Not Applicable |
| D.51 | Has a maintenance programme for the control system been specified? | N | Not Applicable |
| D.5m | Has a condensate removal system been designed? | N | Not Applicable |



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> (<i>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 |
|--------------|---|-------------------|----------------|
| | | Ν | Not Applicable |
| D.6a | Has the daily cover been specified? | | |
| | | Ν | Not Applicable |
| D.6 b | Has the intermediate cover been specified? | | |
| | | Ν | Not Applicable |
| D.6c | Has the temporary capping been specified? | | |
| | | NUS ^{er} | Not Applicable |
| D.6d | Has the Capping System been designed and | (IIC | |
| | does it meet the requirements of the Landfill | | |
| | Directive Annex 1 (3.3)? | | |
| D | a purequir | Ν | Not Applicable |
| D.6 e | Does the Capping System include a flexible membrane liner? | | |
| D.6f | Have all capping materials been specified? | N | Not Applicable |
| | cont of | Ν | Not Applicable |
| D.6g | Has a Method Statement for construction been produced? | | |
| | | Ν | Not Applicable |
| D.6h | Has a Quality Control Plan been produced? | | |
| | | Ν | Not Applicable |
| D.6i | Has a Quality Assurance Plan been produced? | | |
| | | Ν | Not Applicable |
| D.6j | Has a programme for monitoring landfill stability been developed? | | |
| | | Ν | Not Applicable |
| 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

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*.

| 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 🖂 | , sño | not applicable |
| Litter Control | Control method specified | yes the | no no | not applicable |
| | Attachment included | چې yes 🔀 | no | not applicable |
| Traffic Control | Control method put specified ion put to the specified is a specified in the specified in the specified is a specified in the specified in the specified is a specified in the specified | di ⁱⁿ yes 🖂 | no | not applicable |
| | Attachment included | yes 🖂 | no | not applicable |
| Vermin Control | Control method references | yes 🖂 | no | not applicable |
| | Attachment | yes 🖂 | no | not applicable |
| Road Cleansing | Control method specified | yes 🖂 | no | not applicable |
| | Attachment included | yes 🖂 | no | not applicable |

TABLE E.6 ENVIRONMENTAL NUISANCES

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 | N. Nother | e. |
|---|---------------|----------------|
| Monitoring Arrangements specified | yes off of no | not applicable |
| Monitoring points identified, (plus 12-figure grid references) | yes no | not applicable |
| Attachment included | ves 🛛 no | not applicable |
| F.7 Meteorological Data | | |

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 / util | isation |
|---|---------|
| plants | |

| Parameter | Concentration (mg/Nm ³) | Proposed Frequency of Analysis | Information Included Y/N | Method of Analysis | Information Included Y/N |
|--|--|--------------------------------------|--------------------------------|-----------------------|--------------------------------|
| Inlet | | 2 | | | |
| Methane (CH ₄) % v/v | | | | | |
| Carbon dioxide (CO ₂) %v/v | | | | | |
| Oxygen (O ₂) % v/v | | | | | |
| Outlet | | | | | |
| Volumetric Flow Rate | | | | | |
| SO ₂ | | | | | |
| Nox | | | | | |
| CO | | | | | |
| Particulates | | | | | |
| TA Luft Class I, II, III organics | | | | | |
| Hydrochloric acid | | | Sec. | | |
| Hydrogen Fluoride | | | Ter | | |

Table F.9(b) Landfill Gas Monitoring

| Hydrogen Fluoride | | | er. | | | |
|---|--|-----------------|-----------------------------|-------------|-----------------|-----------------------------|
| Table F.9(b) Landfill Gas Monitoring | | | | | | |
| Parameter | Proposed F of Analysis | | Information Included Y/N | Metl Ana | nod of lysis | Information Included Y/N |
| | Gas boreholes / vents/ wells/ perimeter locations | Facility Office | | | | |
| Methane (CH ₄) % v/v | FO | 2 Mar | | | | |
| Carbon Dioxide (CO ₂) % v/v | j ôf C | | | | | |
| Oxygen (O ₂) % v/v | nsent | | | | | |
| Atmospheric Pressure | Cor | | | | | |
| Temperature | | | | | | |

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 solution | not applicable |
| | A HSPECT WITE | |
| | to optimized | |
| | 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 OF ACTIVITY APPLIED FOR

| Waste Management Acts 1996 to 2010 | | Waste Management Acts 1996 to 2010 | | | |
|-------------------------------------|---|------------------------------------|-------------------------------------|-------------|----------------|
| 3rd Schedule (Disposal) Operations | | 4th Schedule (Recovery) Operations | | | |
| Class of Activity Applied For | | Quantity (tpa) | Class of Activity Applied For | | Quantity (tpa) |
| Class D 1 | | | Class R 1 | 20 | stuse. |
| Class D 2 | | | Class R 2. | D D D | |
| Class D 3 | | | Class R3 | Ρ | 122,000 |
| Class D 4 | | Consent of cooping | ton Class R 4 | x | 6,500 |
| Class D 5 | | Formation | Class R 5 | x | 20,000 |
| Class D 6 | | entorcox | Class R 6 | | |
| Class D 7 | | Cous | Class R 7 | | |
| Class D 8 | X | 111,000 | Class R 8 | | |
| Class D 9 | | | Class R 9 | | |
| Class D 10 | | | Class R 10 | | |
| Class D 11 | | | Class R 11 | | |
| Class D 12 | | | Class R 12 | X | 115,500 |
| Class D 13 | X | 20,000 | Class R 13 | X | 115,500 |
| Class D 14 | X | 20,000 | | | |
| Class D 15 | X | 20,000 | | | |

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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) |
|------|---|--|--|
| 2015 | 250,000 | 0 | 250,000 |
| 2016 | 250,000 | 0 | 250,000 |
| 2017 | 250,000 | 0 | 250,000 |
| 2018 | 250,000 | 0 | 250,000 |
| 2019 | 250,000 | 0 | 250,000 |
| | | | |

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 $H_{s} \Gamma(C)$.

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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 | 0 | 140,000 | 4,200,000 |
| Commercial | 0 | 55,000 | 1,650,000 |
| Sewage Sludge | 0 | Not applicable | Not applicable |
| Construction and Demolition | 0 | Not applicable | Not applicable |
| Industrial Non- Hazardous Sludges | 0 | Not applicable | Not applicable |
| Industrial Non- Hazardous Solids | 0 | 55,000 | 1,650,000 |
| Hazardous *(Specify detail in Table H 1.2) | 0 | Not applicable | Not applicable |
| Inert Waste imported for restoration purposes | COMPLE | TE 55% ATOANDFILL & CO | NTAMINATED LAND LY |

*There is no site life defined for the proposed in the acility, it is therefore not possible to predict the total tonnages. Hence in order to generate tonnages for this table an arbitrary number of 30 years was selected. While the overall waste acceptance for the facility is proposed at 250,000 tpa, the split between the waste types above is based on anticipated volumes and may have some variation.

| 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 | Not Applicable | | | | |
| Oil filters | Not Applicable | | | | |
| Asbestos | Not Applicable | | | | |
| Paint and Ink | Not Applicable | | | | |
| Batteries | Not Applicable | | | | |
| Fluorescent Light Bulbs | Not Applicable | | | | |
| Contaminated Soils | Not Applicable | | | | |
| OTHER HAZAI | OTHER HAZARDOUS WASTE (APPLICANT TO SPECIFY) | | | | |
| | | | | | |

variation. TABLE H.1.2 HAZARDOUS WASTE TYPES AND QUANTITIES



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 State whether all waste will be and recommended with the sub-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.4(i) and H.4(ii) of the application form. Applicants should also provide conversion factors used to relate volume (m³) 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 entissions 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 environments 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 A (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 begiven.

Full details including all refevant 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)

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- (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.

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.

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Please refer to Attachment K

| 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.

| 14. 114 011 | |
|----------------|----------------------------|
| yes soft no | not applicable |
| ion puposities | |
| corinspectowne | |
| | For inspection purposition |

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 |
|---------------------|-------|----|----------------|

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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.

| | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | AUSC. |
|--------------------------|---|---------------------|
| Signed by : | La Com Ching of the and oth | Date : 27 Jane 2012 |
| Print signature name: | JOHN CONTROLLY | |
| Position in organisation | Consent of the Provinsibilito | DEVELOPMENT MANAGER |

| Compa | ny sta | amp or s | eal: | |
|-------|--------|----------|-------|----|
| Bord | na | Món | ap.l. | c. |
| | | | | |



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: | Not Applicable |
|-----------------------------------|----------------------------------|
| Location : | |
| Grid Ref. (12 digit, 6E,6N): | <u>د</u> و. |
| Vent Details Diameter: | tion purpose only any other use. |
| Height above Ground(m): | ion puttern |
| Date of commencement of emission: | For inspection owner. |

Characteristics of Emission

| СО | | | | mg/m ³ |
|----------------------------|---------|--------------------|--------------------------------------|--------------------------------|
| Total organic carbon (TOC) | | | | mg/m ³ |
| NOx | | mg/Nm ³ | | |
| | | 0°C | . 3% O ₂ (Liquid or Gas), | 6% O ₂ (Solid Fuel) |
| Maximum volume of e | mission | | | m ³ /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 |
|---------------------------|--------|--------|--------|
|---------------------------|--------|--------|--------|



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

| Emission Point Ref. N ^o : | Refer to Chapter 8 of Volume II of the EIS, to Table 8-21 of the EIS and Attachment E.1 of this Waste Licence Application |
|--------------------------------------|---|
| Source of Emission: | |
| Location : | |
| Grid Ref. (12 digit, 6E,6N): | |
| Vent Details | |
| Diameter: | |
| Height above Ground(m): | |
| Date of commencement: | |

Characteristics of Emission :

| Characteristics of Em | ission : | To see only any other use | | | | | | |
|-----------------------|-------------------------|---------------------------|---------------------|--|--|--|--|--|
| (i) Volume to be a | emitted: | Purpequite | | | | | | |
| Average/day | . Boyd or | Maximum/day | m ³ /d | | | | | |
| Maximum rate/hour | of com3/h | Min efflux velocity | m.sec ⁻¹ | | | | | |
| (ii) Other factors | Consert | - | | | | | | |
| Temperature | °C(max) | °C(min) | °C(avg) | | | | | |
| For Combustion Source | For Combustion Sources: | | | | | | | |
| Volume terms express | sed as : \Box we | t. \Box 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 |
|---------------------------|--------|--------|--------|
|---------------------------|--------|--------|--------|



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

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

Emission Point Reference Number: Refer to Chapter 8 of Volume II of the EIS and to Table 8-21 of the EIS. Refer also to Attachment E of this Waste Licence Application.

| Parameter | | Prior to tr | reatment ⁽¹⁾ | | Brief | | | As discl | harged ⁽¹⁾ | | |
|-----------|-----|-----------------|-------------------------|----------------|----------------------------------|-----|-----------------|----------|-----------------------|-----|------|
| | mg/ | Nm ³ | kg | ŗ∕h | description | mg/ | Nm ³ | kg | /h. | kg/ | year |
| | Avg | Max | Avg | Max | of treatment | Avg | Max | Avg | Max | Avg | Max |
| | | | | Consent of cor | Spectron purposes only any other | | | | | | |

1. Concentrations should be based on Normal conditions of temperature and pressure, (i.e. $0^{\circ}C$,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

Refer to Chapter 8 of Volume II of the EIS. Refer also to Attachment E of this Waste Licence Application.

| Emission point | Description | - | Emission details ¹ | | | Abatement system employed |
|-------------------|-------------|----------------|-------------------------------|----------------|---------|---------------------------|
| Reference Numbers | | material | $mg/Nm^{3(2)}$ | kg/h. | kg/year | |
| | Ć | For inspection | a purposes 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.

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EMISSIONS TO SURFACE WATERS TABLE E.2(i): (One page for each emission)

Emission Point:

| Emission Point Ref. N ^o : | Refer to Chapter 6 of Volume II of the EIS and Attachment E.2 of this Waste Licence Application |
|--|---|
| Source of Emission: | |
| Location : | |
| Grid Ref. (10 digit, 5E,5N): | |
| Name of receiving waters: | |
| Flow rate in receiving waters: | m ³ .sec ⁻¹ Dry Weather Flow m ³ .sec ⁻¹ 95%ile flow |
| Available waste assimilative capacity: | kg/day |



| capacity. | | alt'ant | | | | | |
|----------------------------------|----------------|-------------|----------------|--|--|--|--|
| Emission Details: | | | | | | | |
| (i) Volume to be emitted viright | | | | | | | |
| Normal/day | m ³ | Maximum/day | m ³ | | | | |
| Maximum rate/hour | m ³ | | | | | | |

(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 :__Refer to Chapter 6 of Volume II of the EIS. Refer also to Attachment E of this Waste Licence Application._____

| Parameter | | Prior to t | treatment | | <u>ر</u> و. | As discharged | | | % Efficiency |
|-----------|----------------------------------|---------------------------------|-----------|---|-----------------------------------|------------------------------|--------|---------|--------------|
| | Max. hourly average (mg/l) | Max. daily average (mg/l) | kg/day | kg/year | Max. hourly average (mg/l) off | Max. daily average (mg/l) | kg/day | kg/year | |
| | | | ැත් | For inspective For inspective Rent of copyright | ourposes of the | | | | |



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

Emission Point: Not Applicable

| Emission Point Ref. Nº: | Not applicable |
|-----------------------------------|----------------|
| Location of connection to sewer : | |
| Grid Ref. (10 digit, 5E,5N): | |
| Name of sewage undertaker: | |

Emission Details:

| (i) Volume to be emitted | <u>ي</u> و. |
|----------------------------------|-------------------------------------|
| Normal/day m ³ | Maximum/day m ³ |
| Maximum rate/hour m ³ | os ^e d ^{for an} |

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 |
|---------------------------|--------|--------|--------|
| \sim | | | |

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

Emission point reference number :__Not Applicable_____

| 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) | | | | nse. | | | |
| | | | | | For inspection purpose only : | BY Other | | | |
| | | | | Consent | 0. | | | | |

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

Emission Point or Area: Not Applicable

| Emission Point/Area Ref. Nº: | Not Applicable |
|---|--|
| Emission Pathway: (borehole, well, percolation area, soakaway, landspreading, etc.) | |
| Location : | |
| Grid Ref. (10 digit, 5E,5N): | |
| Elevation of discharge: (relative to Ordnance Datum) | |
| Aquifer classification for receiving groundwater body: | |
| Groundwater vulnerability assessment (including vulnerability rating): | |
| Identity and proximity of groundwater sources at risk (wells, springs, etc): | Ses officenty the |
| Identity and proximity of surface water bodies at risk: | Spection number of the state of |
| Emission Details: | <u>\$7.</u> |
| Con- | |

Emission Details:

| (i) Volume to be emi | ote tted | | |
|----------------------|----------------|-------------|----------------|
| Normal/day | m ³ | Maximum/day | m ³ |
| Maximum rate/hour | m ³ | | |

(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

Refer to Chapter 9 of Volume II of the EIS and Attachment E.5 of this Waste Licence Application

| Source | Emission point Ref. No | Equipment Ref. No | Sound Pressure ¹ dBA at reference distance | Octave bands (Hz) Sound Pressure ¹ Levels dB(unweighted) per band | | | | | Impulsive or tonal qualities | Periods of Emission | | | | |
|--------|------------------------------|----------------------|---|---|-----------|----------|-------|------|------------------------------|---------------------------|----|----|--|--|
| | | | | 31.5 | 63 | 125 | 250 | 5.00 | 1K | 2K | 4K | 8K | | |
| | | | | | | | othe | X US | | | | | | |
| | | | | | | | d'and | | | | | | | |
| | | | | | 30 | POSCIE O | | | | | | | | |
| | | | | | ection te | | | | | | | | | |
| | | | | Forins | n. | | | | | | | | | |
| | | | | FOI DU | | | | | | | | | | |
| | | | Colle | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

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



TABLE F.1: ABATEMENT / TREATMENT CONTROL

Emission point reference number :

Refer to Chapter 2 of Volume II of the EIS, Chapter 6 (Water) of Volume II of the EIS and Chapter 8 (Air) of Volume II the EIS. Refer also to Attachment E of this Waste Licence Application.

| Control ¹ parameter | Equipment ² | Equipment maintenance | Equipment calibration | Equipment back-up |
|-----------------------------------|------------------------|--------------------------|-----------------------|----------------------|
| | | | | |
| | | | | |
| | | | | |

| | | A USC. | |
|--------------------------------|--|----------------------|----------------------------------|
| Control ¹ parameter | Monitoring to be carried out ³ | Monitoring equipment | Monitoring equipment calibration |
| | | Th Putpose due due | |
| | (Inspect | or the t | |
| | For inspect | | |
| | Calsent | | |

¹ 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). :_Refer to Section 2.2.7 of the EIS. Refer also to Attachment F of this Waste Licence Application._____

| | | | only any other use. |
|-----------|----------------------|---|---------------------|
| Parameter | Monitoring frequency | Accessibility of Sampling Points | other |
| | | | mily any |
| | | يى | 2501 |
| | | Durponi | |
| | | specifort teet | |
| | | Fortherite | |
| | | T ^{CO} ON AND AND AND AND AND AND AND AND AND AN | |
| | | Conser | |
| | | | |



Consent of constitution of the treat of any other use.



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

Monitoring Point Reference No:_Refer to Section 2.2.7 of the EIS. Refer also to Attachment F of this Waste Licence Application._____

| Parameter | Monitoring frequency | Accessibility of Sampling point | |
|-----------|----------------------|------------------------------------|-----------------------------|
| | | Sampling point | artoses only any other use. |



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

Refer to Section 2.2.3 of the EIS.

| Ref. Nº or Code | Material/ Substance ⁽¹⁾ | CAS Number | Danger ⁽²⁾ Category | Amount Stored (tonnes) | Annual Usage (tonnes). | Nature of Use | R ⁽³⁾ - Phrase | S ⁽³⁾ - Phrase |
|-----------------------|--|---------------|--|------------------------------|------------------------------|-----------------------------------|------------------------------|------------------------------|
| | | | | aupose only. | any other e | | | |
| Notes: | In cases where a mate c.f. Article 2(2) of SI c.f. Schedules 2 and 3 | Nº 77/94 | a number of distinct and availated a number of dist | te dangerou: | s substance | s, please give details for each c | omponent s | ubstance. |



TABLE H.4(i): WASTE Hazardous Waste Recovery/Disposal

Not applicable to this application

| Waste material | EWC Code | Main source ¹ | Qı | antity | On-site Recovery/Disposal | Off-site Recovery, reuse or recycling | Off-site Disposal |
|----------------|----------|--------------------------|-------------------|-----------------------------|------------------------------|--|------------------------------------|
| | | | Tonnes / month | m ³ / month et a | (Method & Location) | (Method, Location & Undertaker) | (Method, Location & Undertaker) |
| | | Ć | month | attose of for any | | | |

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



TABLE H.4(ii) WASTE - Other Waste Recovery/Disposal

Refer to Process Flow Diagrams provided in Section 2.3 of Volume II of the EIS and with Attachment D of this Waste Licence Application.

| Waste material | EWC Code | Main source ¹ | Qua | ntity | On-site recovery/disposal ² | Off-site Recovery, reuse or recycling | Off-site Disposal |
|----------------|----------|--------------------------|----------------|------------------------|--|--|------------------------------------|
| | | | Tonnes / month | m ³ / month | (Method & Location) | (Method, Location & Undertaker) | (Method, Location & Undertaker) |
| | | | | | . 15 ⁰ . | | |
| | | | | | other | | |
| | | | | | only. and | | |
| | | | | spection purpos | | | |
| | | | | FOLINSPECTOWN | | | |

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

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(Sheet 1 of 2) Monitoring Point/ Grid Reference: __Refer to Chapter 6 & Chapter 2 of Volume II of the EIS. Refer also to Attachment F of this Waste Licence Application._____

| Parameter | | | sults g/l) | | Sampling method ² (grab, drift, u ^{se} etc.) | Normal Analytical Range ² | Analysis method / technique |
|--|------|------|---------------|-------------|---|--|-----------------------------------|
| | Date | Date | Date | Date | only any | | |
| pH | | | | | See dio | | |
| Temperature | | | | STATE STATE | Politic | | |
| Electrical conductivity EC | | | | tionet | | | |
| Ammoniacal nitrogen NH ₄ -N | | | | sper own | | | |
| Chemical oxygen demand | | | | FOLISTER | | | |
| Biochemical oxygen demand | | | | COP. | | | |
| Dissolved oxygen DO | | | - M | or | | | |
| Calcium Ca | | | COILSON | | | | |
| Cadmium Cd | | | U | | | | |
| Chromium Cr | | | | | | | |
| Chloride Cl | | | | | | | |
| Copper Cu | | | | | | | |
| Iron Fe | | | | | | | |
| Lead Pb | | | | | | | |
| Magnesium Mg | | | | | | | |
| Manganese Mn | | | | | | | |



| Mercury Hg | | | | |
|------------|--|--|--|--|

Surface Water Quality (Sheet 2 of 2)

| Parameter | | | sults 1g/l) | | Sampling method (grab, drift etc.) | Normal Analytical Range | Analysis method / technique |
|--|------|------|----------------|------------|--|-------------------------------|-----------------------------------|
| | Date | Date | Date | Date | | | |
| Nickel Ni | | | | | | | |
| Potassium K | | | | | in the second se | | |
| Sodium Na | | | | | ather | | |
| Sulphate SO ₄ | | | | | alt'ally | | |
| Zinc Zn | | | | | es of for | | |
| Total alkalinity (as CaCO ₃) | | | | | 203 iteo | | |
| Total organic carbon TOC | | | | ion pe | toot | | |
| Total oxidised nitrogen TON | | | | Dectrowne | | | |
| Nitrite NO ₂ | | | | at install | | | |
| Nitrate NO ₃ | | | | toby | | | |
| Faecal coliforms (/100mls) | | | X | 8 | | | |
| Total coliforms (/100mls) | | | nsen | | | | |
| Phosphate PO ₄ | | | Cos | | | | |



Table I.4(i) GROUNDWATER QUALITY

Refer to Chapter 5 of Volume II of the EIS. Refer also to Attachment F of this Waste Licence Application

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

| Parameter | Results (mg/l) | | | | Sampling method (composite etc.) | Normal Analytical Range | Analysis method / technique |
|--|-------------------|------|-----------|-----------------|---|-------------------------------|-----------------------------------|
| | Date | Date | Date | Date | | | |
| рН | | | | | | | |
| Temperature | | | | | | | |
| Electrical conductivity EC | | | | | | | |
| Ammoniacal nitrogen NH ₄ -N | | | | | 150. | | |
| Dissolved oxygen DO | | | | | ther | | |
| Residue on evaporation (180°C) | | | | 5 80 | i any | | |
| Calcium Ca | | | | and and the art | | | |
| Cadmium Cd | | | | 2 Proof | | | |
| Chromium Cr | | | 8 | citor ner | | | |
| Chloride Cl | | | inst inst | at C | | | |
| Copper Cu | | | FUDT | | | | |
| Cyanide Cn, total | | | , or | | | | |
| Iron Fe | | | - IISelft | | | | |
| Lead Pb | | | Co. | | | | |
| Magnesium Mg | | | | | | | |
| Manganese Mn | | | | | | | |
| Mercury Hg | | | | | | | |
| Nickel Ni | | | | | | | |
| Potassium K | | | | | | | |
| Sodium Na | | | | | | | |



GROUNDWATER QUALITY (SHEET 2 OF 2)

| Parameter | | | Results (mg/l) | | Sampling method (composite, dipper etc.) | Normal Analytical Range | Analysis method / technique |
|--|------|------|-------------------|-------------|---|-------------------------------|-----------------------------------|
| | Date | Date | Date | Date | | | |
| Phosphate PO ₄ | | | | | | | |
| Sulphate SO ₄ | | | | | | | |
| Zinc Zn | | | | | | | |
| Total alkalinity (as CaCO ₃) | | | | | | | |
| Total organic carbon TOC | | | | | | | |
| Total oxidised nitrogen TON | | | | | 15 ⁰ . | | |
| Arsenic As | | | | | ther | | |
| Barium Ba | | | | | NT. MY | | |
| Boron B | | | | , e | offor | | |
| Fluoride F | | | | 11005 | red | | |
| Phenol | | | | on particol | | | |
| Phosphorus P | | | | oecti-whe | | | |
| Selenium Se | | | | in the date | | | |
| Silver Ag | | | ¢¢ | RAL | | | |
| Nitrite NO ₂ | | | , of | | | | |
| Nitrate NO ₃ | | | Consent | | | | |
| Faecal coliforms (/100mls) | | | Cox | | | | |
| Total coliforms (/100mls) | | | | | | | |
| Water level (m OD) | | | | | | | |

Table I.6(i) Ambient Noise Assessment

Refer to Chapter 9 of 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) _{eq} | L(A) ₁₀ | L(A) ₉₀ | | | |
| 1. SITE | | | | | | | |
| BOUNDARY | | | | | | | |
| Location 1: | | | | | | | |
| Location 2: | | | | | | | |
| Location 3: | | | | | | | |
| Location 4: | | | | | | | |
| 2. NOISE | | | | | | | |
| SENSITIVE | | | | | | | |
| LOCATIONS | | | | | | | |
| Location 1: | | | <u>ي</u> . | | | | |
| Location 2: | | | and other us | | | | |
| Location 3: | | | N Oth | | | | |
| Location 4: | | only | are. | | | | |
| ΓE: All locations should l | be identified on accompa | pecton puper equites. | | | | | |

ANNEX – Standard Forms