

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

Fairgreen House,  
Fairgreen Road,  
Galway, Ireland.  
Tel: +353 (0)91 565211  
Fax: +353 (0)91 565398

Market Square,  
Castlebar,  
Co. Mayo, Ireland.  
Tel: +353 (0)94 9021401  
Fax: +353 (0)94 9021534

ul. Cystersów 9,  
31-553 Kraków,  
Poland.  
Tel: +48 12 353 8646  
Fax: +48 12 353 7329

CAB International,  
Nosworthy Way, Wallingford,  
Oxfordshire, OX10 8DE, United Kingdom.  
Tel: +44 1491 829327  
Fax: +44 1491 833508

Waste Licensing Section,  
Office of Climate, Licensing and Resource Use,  
Environmental Protection Agency,  
P.O. Box 3000,  
Johnstown Castle Estate,  
Co. Wexford.

22 August 2012

**RE: Application to the Environmental Protection Agency for a Technical  
review of Waste Licence W 0256-01  
Lennon Quarries Ltd., Tallagh Soil & stone Recovery Site, Belmullet**

Dear Sir/Madam,

I am writing on behalf of our client Lennon Quarries Ltd., who operate a site at Tallagh, Belmullet, Co. Mayo, under waste licence W0256-01 and are applying for a Technical Review of their waste licence.

Under the application for the Technical Review, the proposed works involve the acceptance of 90,000 tonnes per annum of soil and stone and its recovery, by spreading material over the site area, with a consequential benefit for improving the land for agricultural use. There is no proposed change to the final level of the site, as currently licensed, in Waste Licence W0256-01.

The application for the Technical review of the Licence is provided in hardcopy (1 No. signed original and 2 No. copies) and digital format (2 No. copies) and the content of the electronic files on the accompanying CD-ROM(s) contain a true copy of the original application.

We have also included a cheque for €6,000 in respect of the application fee.

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'Keefe

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

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



**60 YEARS OF  
EXCELLENCE  
IN ENGINEERING**

The relevant Waste Recovery Activities, as per the Fourth Schedule of the Waste Management Acts 1996 to 2011 and the Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004) to which this application relates are:

Fourth Schedule - Waste Recovery Activities:

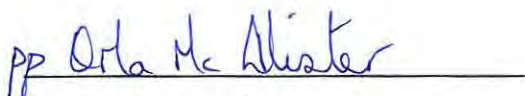
The **Principle Activity** to be carried out at the site:

Fourth Schedule, Class R4 "Recycling or Reclamation of other Inorganic Materials"

The operations will also be covered under the following class of activity:

Fourth Schedule, Class R13 "**Storage of Waste intended for Submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced**"

Yours Sincerely,



**Dr. Emma Sweeney**

**Senior Environmental Scientist**

For inspection purposes only.  
Consent of copyright owner required for any other use.



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

Fairgreen House,  
Fairgreen Road,  
Galway, Ireland.  
Tel: +353 (0)91 565211  
Fax: +353 (0)91 565398

Market Square,  
Castlebar,  
Co. Mayo, Ireland  
Tel: +353 (0)94 9021401  
Fax: +353 (0)94 9021534

ul. Cystersów 9,  
31-553 Kraków,  
Poland  
Tel: +48 12 353 8646  
Fax: +48 12 353 7329

CAB International,  
Nosworthy Way, Wallingford,  
Oxfordshire, OX10 8DE, United Kingdom  
Tel: +44 1491 829327  
Fax: +44 1491 833508

Frank Clinton Esq.  
EPA  
Johnstown Castle  
Co. Wexford

17<sup>th</sup> August 2012

**RE Licence WO256-01 BY email and Post**

Dear Mr Clinton,

Following our pre-consultation meetings and correspondence with the EPA over recent months, I confirm that our client Lennon Quarries Ltd wishes to apply for a Technical Review of the above Licence. The relevant application form and fee will follow under separate cover. The newspaper and site notices will also issue next week.

It is our understanding that the fee level is for the category "recovery of waste", as per Section 4 of the schedule of Fees from SI 395 of 2004, Schedule 2 -notwithstanding that the imported material is inert soil and stone being reused for land reclamation. As this is a simple application, a partial refund may apply.

I also understand that the EPA will endeavour to process this application on or before 1<sup>st</sup> February 2013, given the imminent availability of additional material which will enable the reclamation of the site over a shorter time frame. Indeed a revised timescale for the import of material is the only change sought to the original Licence.

The Application Form has Appendices attached outlining the planning status of the site in the context of the revised tonnage; monitoring information indicating the adherence to EPA conditions; correspondence with the EPA outlining compliance matters and correspondence from the neighbouring community and agencies in relation to the application. While new regulations in relation to EIA are imminent, no change in the planning status of the site is anticipated.

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



**60 YEARS OF  
EXCELLENCE  
IN ENGINEERING**

Yours sincerely

A handwritten signature in black ink, appearing to read 'Sean Finlay', with a long horizontal line extending to the right.

Sean Finlay

Director

CC; T.J. Lennon: Orla McAllister(Tobin)

*For inspection purposes only.  
Consent of copyright owner required for any other use.*

LENNON QUARRIES LTD.  
Glencastle, Bunnahowen, Ballina, County Mayo

**LENNON QUARRIES  
SOIL & STONE RECOVERY FACILITY,  
TALLAGH, BELMULLET, CO MAYO**

**APPLICATION FOR TECHNICAL REVIEW  
OF WASTE LICENCE W0256-01**

*For inspection purposes only.  
Consent of copyright owner required for any other use.*

AUGUST 2012

TOBIN CONSULTING ENGINEERS





# Waste Licence Application Form

For inspection purposes only  
Consent of copyright owner required for any other use

<b>EPA Ref. N<sup>o</sup>:</b> <i>(Office use only)</i>	<input type="text"/>
--	----------------------

*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

**CONTENTS**

	<b>Page</b>
<b>INTRODUCTION</b>	<b>3</b>
<b>CHECKLIST</b>	<b>4</b>
<b>PROCEDURES</b>	<b>11</b>
<b>SECTION A NON-TECHNICAL SUMMARY</b>	<b>13</b>
<b>SECTION B GENERAL</b>	<b>14</b>
<b>SECTION C MANAGEMENT OF THE FACILITY</b>	<b>21</b>
<b>SECTION D INFRASTRUCTURE &amp; OPERATION</b>	<b>22</b>
<b>SECTION E EMISSIONS</b>	<b>27</b>
<b>SECTION F CONTROL &amp; MONITORING</b>	<b>29</b>
<b>SECTION G RESOURCES USE &amp; ENERGY EFFICIENCY</b>	<b>32</b>
<b>SECTION H MATERIALS HANDLING</b>	<b>33</b>
<b>SECTION I EXISTING ENVIRONMENT &amp; IMPACT OF THE FACILITY</b>	<b>36</b>
<b>SECTION J ACCIDENT PREVENTION &amp; EMERGENCY RESPONSE</b>	<b>39</b>
<b>SECTION K REMEDIATION, DECOMMISSIONING, RESTORATION AND AFTERCARE</b>	<b>39</b>
<b>SECTION L STATUTORY REQUIREMENTS</b>	<b>40</b>
<b>SECTION M DECLARATION</b>	<b>41</b>
<b>ANNEX 1: STANDARD FORMS</b>	

## INTRODUCTION

A valid application must contain the information prescribed in the Waste Management (Licensing) Regulations 2004 (SI No. 395 of 2004). **The applicant is strongly 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 clearly 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	<b>Section B.1</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

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

LOCATION	<b>Section B.3</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

- (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	<b>NOT APPLICABLE</b> <b>(Section B.4)</b> <b>(Attachment B.4)</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

- (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	<b>Section B.2</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

- (e) describe the nature of the facility or premises concerned, including the proposed capacity of the facility or premises, and in the case of

WASTE Application Form

application in respect of a landfill of waste, the requirements specified in Annex 1 of the Landfill Directive,

LOCATION	<b>Section B.7</b> <b>(B.7.1, B.7.2 &amp; B.7.4)</b> <b>Attachment B.7</b> <b>(B.7.1, B.7.2 &amp; B.7.4)</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

(f) specify the class or classes of activity concerned, in accordance with the Third and Fourth Schedules of the Act<sup>1</sup> 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	<b>Section B.7</b> <b>(B.7.1)</b> <b>Attachment B.7.1</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

(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	<b>Section H.1</b> <b>Attachment H.1</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

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

LOCATION	<b>Section G.1</b> <b>Attachment G.1</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

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

LOCATION	<b>Section D.2</b> <b>Attachment D.2</b> <b>Section F.1</b> <b>Attachment F.1</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

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

WASTE Application Form

- (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	<b>Section L.1</b> <b>Attachment L.1</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

- (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	<b>Section E</b> <b>(E.1, E.2, E.3, E.4, E.5 &amp; E.6)</b> <b>Attachments E.1, E.2, E.3, E.4, E.5 &amp; E.6</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

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

LOCATION	<b>Section I</b> <b>(I.1, I.2, I.3, I.4, I.5, I.6 &amp; I.7)</b> <b>Attachments I.1, I.2, I.3, I.4, I.5, I.6 &amp; I.7</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

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

LOCATION	<b>Section F</b> <b>(F.2, F.3, F.4, F.5, F.6, F.7, F.8 &amp; F.9)</b> <b>Attachments F.2, F.3, F.4, F.5, F.6, F.7, F.8 &amp; F.9</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

WASTE Application Form

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

LOCATION	<b>Section H.2</b> <b>Attachment H.2</b> <b>Section H.3</b> <b>Attachment H.3</b> <b>Section H.4</b> <b>Attachment H.4</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

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

LOCATION	<b>Section H.4</b> <b>Attachment H.4</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

(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	<b>Section I</b> <b>(I.1, I.2, I.3, I.4, I.5, I.6 &amp; I.7)</b> <b>Attachments I.1, I.2, I.3, I.4, I.5, I.6 &amp; I.7</b> <b>Section J</b> <b>Attachment J</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

(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	<b>Section K</b> <b>Attachment K</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

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



WASTE Application Form

(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	<b>NOT APPLICABLE</b> <b>Not a Landfill Application</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

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

LOCATION	<b>NOT APPLICABLE</b> <b>Not a Landfill Application</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

(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	<b>Section B.8</b> <b>Attachment B.8</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

(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	<b>NOT APPLICABLE</b> <b>No Emission to Aquifer</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

(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	<b>Section A</b> <b>Attachment A.1</b>	
CHECKED	Applicant <input checked="" type="checkbox"/>	Official <input type="checkbox"/>

Article 12(4) Without prejudice to Article 13(1) and (2), an application for a licence shall be accompanied by -

WASTE Application Form

(a) a copy of the relevant page of the newspaper(s) in which the notice in accordance with article 6 has been published,

LOCATION	<b>Section B.6</b> <b>Attachment B.6</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

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

LOCATION	<b>Section B.6</b> <b>Attachment B.6</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

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

LOCATION	<b>Section B.6</b> <b>Attachment B.6</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

(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	<b>Attachment B.6</b> <b>And Application Drawings</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

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

LOCATION	<b>Section I</b> <b>(I.1, I.2, I.3, I.4, I.5, I.6 &amp; I.7)</b> <b>Attachments I.1, I.2, I.3, I.4, I.5, I.6 &amp; I.7</b> <b>And Application Drawings</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>



WASTE Application Form

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

LOCATION	<b>Section F (F.2, F.3, F.4, F.5, F.6, F.7, F.8 &amp; F.9) Attachments F.2, F.3, F.4, F.5, F.6, F.7, F.8 &amp; F.9 And Application Drawings</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

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

INCLUDED Y/N	<b>Yes</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

**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	<b>Yes</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

CD OF PDF FILES PROVIDED? Y/N	<b>Yes</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

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

EIA REQUIRED ? Y/N	<b>NO</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>
3 HARD COPIES OF EIS INCLUDED ? Y/N	<b>NOT APPLICABLE</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>
16 CD versions of EIS, as PDF files, PROVIDED? Y/N	<b>NOT APPLICABLE</b>	
CHECKED	<b>Applicant</b> <input checked="" type="checkbox"/>	<b>Official</b> <input type="checkbox"/>

## PROCEDURES

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

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

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

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

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

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

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

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



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

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

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

Note: Drawings. The following guidelines are included to assist applicants:

- All drawings submitted should be titled and dated.
- They should have a **unique reference number** and should be signed by a clearly identifiable person.
- They should indicate a scale and the **direction of north**.
- All drawings should, generally, be to a scale of between 1:20 to 1:500, depending upon the degree of detail needed to be shown and the size of the facility. Drawings delineating the boundary can be to a smaller scale of 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.**



WASTE Application Form

**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**.

For inspection purposes only.  
Consent of copyright owner required for any other use.

**SECTION B GENERAL****B.1 Applicant's Details****Name\*:** **Lennon Quarries Ltd.****Address:** **Glencastle****Bunnahowen****Ballina****County Mayo****Tel:** **097-81297****Fax:** **097-81734****e-mail:** **tjlennon@lennonquarries.com**

\* 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:** **Dr. Emma Sweeney, Senior Environmental Scientist****Address:** **Tobin Consulting Engineers****Market Square****Castlebar****County Mayo****Tel:** **094-9021401****Fax:** **094-9021534****e-mail:** **emma.sweeney@tobin.ie****Address of registered or principal office of Body Corporate (if applicable)****Address:** **Glencastle****Bunnahowen****Ballina****County Mayo****Tel:** **097-81297****Fax:** **097-81734****e-mail:** **tjlennon@lennonquarries.com**

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

- a Certified Copy of the Certificate of Incorporation or Memorandum and Article of Association;
- the Company's Registration Number from the Companies Registry Office; and
- a list of the Company Directors.



WASTE Application Form

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

Landowner	<input checked="" type="checkbox"/>
Lessee	<input type="checkbox"/>
Prospective Purchaser	<input type="checkbox"/>
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:

Address:

NOT APPLICABLE  
No Other Occupiers

Tel:

Fax:

e-mail:

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 (≤A3) showing the above details should be included in Attachment B1.

Name:

Address:

NOT APPLICABLE

Tel:

Fax:

e-mail:

\*Current at the time the application is submitted

B.2 Location of Activity

Name: Lennon Quarries Ltd. - Soil Recovery Facility

Address\*: Tallagh  
Belmullet  
County Mayo

Tel: None (Use Lennon Quarries Ltd. - 097-81297)

Fax: None (Use Lennon Quarries Ltd. - 097-81734)

e-mail: None (Use Lennon Quarries Ltd. - tjlennon@lennonquarries.com)

\* Include any townland



National Grid Reference (8 digit 4E,4N)	Bench Mark 1: 470040.839E, 835694.372N
	Bench Mark 2: 470033.240E, 835690.890N

Location maps (≤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: **Mayo County Council**

---

Address: **Arás an Chontae**

---

**The Mall**

---

**Castlebar**

---

**County Mayo**

---

Tel: **094-9024444**

---

Fax: **094-9023937**

---

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?

<b>Planning Authority notified</b>	Yes <input checked="" type="checkbox"/>
	No <input type="checkbox"/>

Planning Permission relating to this application:-

<i>has been obtained</i>	<input type="checkbox"/>
<i>is being processed</i>	<input type="checkbox"/>
<i>is not yet applied for</i>	<input type="checkbox"/>
<i>is not required</i>	<input checked="" type="checkbox"/>

<b>Local Authority Planning File Reference N<sup>o</sup>:</b>	<b>NOT APPLICABLE</b>
---	-----------------------

**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.*

**ATTACHMENT B.3 – CORRESPONDANCE FROM LOCAL AUTHORITY RELATING TO PLANNING**

**B.4 Sanitary Authority**

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

**Name:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
**Tel:** \_\_\_\_\_  
**Fax:** \_\_\_\_\_

**NOT APPLICABLE**  
**No Discharge of Effluent to**  
**Sewer, Existing or Proposed**

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.

<b>Within SFADCo. Area</b>	<b>Yes</b> <input type="checkbox"/>	<b>No</b> <input checked="" type="checkbox"/>
----------------------------	-------------------------------------	---

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

**Name:** **Health Service Executive - Western Area**  
**Address:** **Merlin Park Regional Hospital**  
**Galway**  
\_\_\_\_\_  
**Tel:** **091-751131**  
**Fax:** **091-752644**

**B.6 Notices and Advertisements**

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

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

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

**B.7.1 Specify the class or classes of activity in Table B.7.1, in accordance with the Third Schedule or Fourth Schedule to the Waste Management Acts 1996 to 2010, 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 MANAGEMENT ACTS 1996 TO 2010**

Waste Management Acts 1996 to 2010					
Third Schedule Waste Disposal Operations		Y/N	Fourth Schedule Waste Recovery Operations		Y/N
D 1	Deposit into or on to land (e.g. including landfill, etc.).	N	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: <ul style="list-style-type: none"> <li>- 0.60 for installations in operation and permitted in accordance with applicable Community acts before 1 January 2009,</li> <li>- 0.65 for installations permitted after 31 December 2008,</li> </ul> using the following formula, applied in accordance with the reference document on Best Available Techniques for Waste Incineration: Energy efficiency = $(E_p - (E_f + E_i)) / (0.97 \times (E_w + E_f))$ where— ‘Ep’ means annual energy produced as heat or electricity and is calculated with energy in the form of electricity being multiplied by 2.6 and heat produced for commercial use multiplied by 1.1(GJ/year), ‘Ef’ means annual energy input to the system from fuels contributing to the production of steam (GJ/year), ‘Ew’ means annual energy contained in the treated waste calculated using the net calorific value of the waste (GJ/year), ‘Ei’ means annual energy imported excluding Ew and Bf(GJ/year), ‘0.97’ is a factor accounting for energy losses due to bottom ash and radiation.	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	N

## WASTE Application Form

				processes), which includes gasification and pyrolysis 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 (P)
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.	N
D 6	Release into a water body except seas/oceans.	N	R 6	Regeneration of acids or bases.	N
D 7	Release to seas/oceans including sea-bed insertion.	N	R 7	Recovery of components used for pollution abatement.	N
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.	N	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.	N	R 10	Land treatment resulting in benefit to agriculture or ecological improvement.	N
D 11	Incineration at sea (this operation is prohibited by EU legislation and international conventions).	N	R 11	Use of waste obtained from any of the operations numbered R 1 to R 10.	N
D 12	Permanent storage (e.g. emplacement of containers in a mine, etc).	N	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).	N
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).	N	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.	N			
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).	N			

**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.

<b>Maximum Annual Tonnage (tpa)</b>	<b>Up to maximum 90,000 Tonnes per Annum</b>
<b>Year</b>	<b>2013 until licensed land raise reached</b>

**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 disposal activity 1.1 – 3.3)	<b>NOT APPLICABLE</b>
Recovery of Waste (4)	10,000 / 6,000
<b>TOTAL</b>	<b>TOTAL €6,000</b>

**TABLE B.7.4 (FOR A LANDFILL APPLICATION)**

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

(a) landfill for hazardous waste	<input type="checkbox"/>
(b) landfill for non-hazardous waste	<input type="checkbox"/>
(c) landfill for inert waste	<input type="checkbox"/>

**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.

<b>Regulations Apply</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
--------------------------	------------------------------	--

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

**SECTION C MANAGEMENT OF THE FACILITY**

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

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

This information should form **Attachment C 1**.

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

Name	Position	Duties and Responsibilities	Experience /Qualifications
Mr. Thomas J. Lennon	Managing Director	<b>See Attachment C.1</b>	6-7 Years Experience in Waste Management
Mr. Dermott Lennon	Facility Manager		6-7 Years Experience in Waste Management
Mr. Thomas J. Lennon (Junior)	Deputy Facility Manager & Machine Operative		6-7 Years Experience in Waste Management

**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	Refer to Attachment D.1.a
D.1.b	Designs for site roads	Y	Refer to Attachment D.1.b
D.1.c	Design of hardstanding areas	Y	Refer to Attachment D.1.c
D.1.d	Plant	Y	Refer to Attachment D.1.d
D.1.e	Wheel-wash	N	NOT APPLICABLE Refer to Attachment D.1.e
D.1.f	Laboratory facilities	N	NOT APPLICABLE Refer to Attachment D.1.f
D.1.g	Design and location of fuel storage areas	N	NOT APPLICABLE Refer to Attachment D.1.g
D.1.h	Waste quarantine areas	Y	Refer to Attachment D.1.h
D.1.i	Waste inspection areas	Y	Refer to Attachment D.1.i
D.1.j	Traffic control	Y	Refer to Attachment D.1.j
D.1.k	Sewerage and surface water drainage infrastructure	Y	Refer to Attachment D.1.k
D.1.l	All other services	Y	Refer to Attachment D.1.l
D.1.m	Plant sheds, garages and equipment compound	N	NOT APPLICABLE Refer to Attachment D.1.m
D.1.n	Site accommodation	Y	Refer to Attachment D.1.n
D.1.o	A fire control system, including water supply	N	NOT APPLICABLE Refer to Attachment D.1.o
D.1.p	Civic amenity facilities	N	NOT APPLICABLE Refer to Attachment D.1.p
D.1.q	Any other waste recovery infrastructure	N	NOT APPLICABLE Refer to Attachment D.1.q
D.1.r	Composting infrastructure	N	NOT APPLICABLE Refer to Attachment D.1.r
D.1.s	Construction and Demolition waste infrastructure	N	NOT APPLICABLE Refer to Attachment D.1.s



D.1.t	Incineration infrastructure (if applicable). Provide information to fulfil Article 4 (2) & (3) of the Incineration of Waste Directive	N	NOT APPLICABLE Refer to Attachment D.1.t
D.1.u	Any other infrastructure	N	NOT APPLICABLE Refer to Attachment D.1.u

**D.2 Facility Operation**

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

Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
---------------------	---	-----------------------------	---

**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.

**NOT APPLICABLE**

**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**

		y/n	Comments
D.3.a	Provide information to fulfil Annex 1 of the Landfill Directive		
D.3.b	What type of liner system is specified?		
D.3.c	Has a Quality Control Plan been specified?		
D.3.d	Has a Quality Assurance Plan been specified?		
D.3.e	Have independent, third-party supervision, testing and controls been specified?		

D.3.f	Have basal gradients for all cells and access ramps to the cells been designed?		
D.3.g	Has a leak detection survey been specified?		

**D.4 Leachate Management**

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

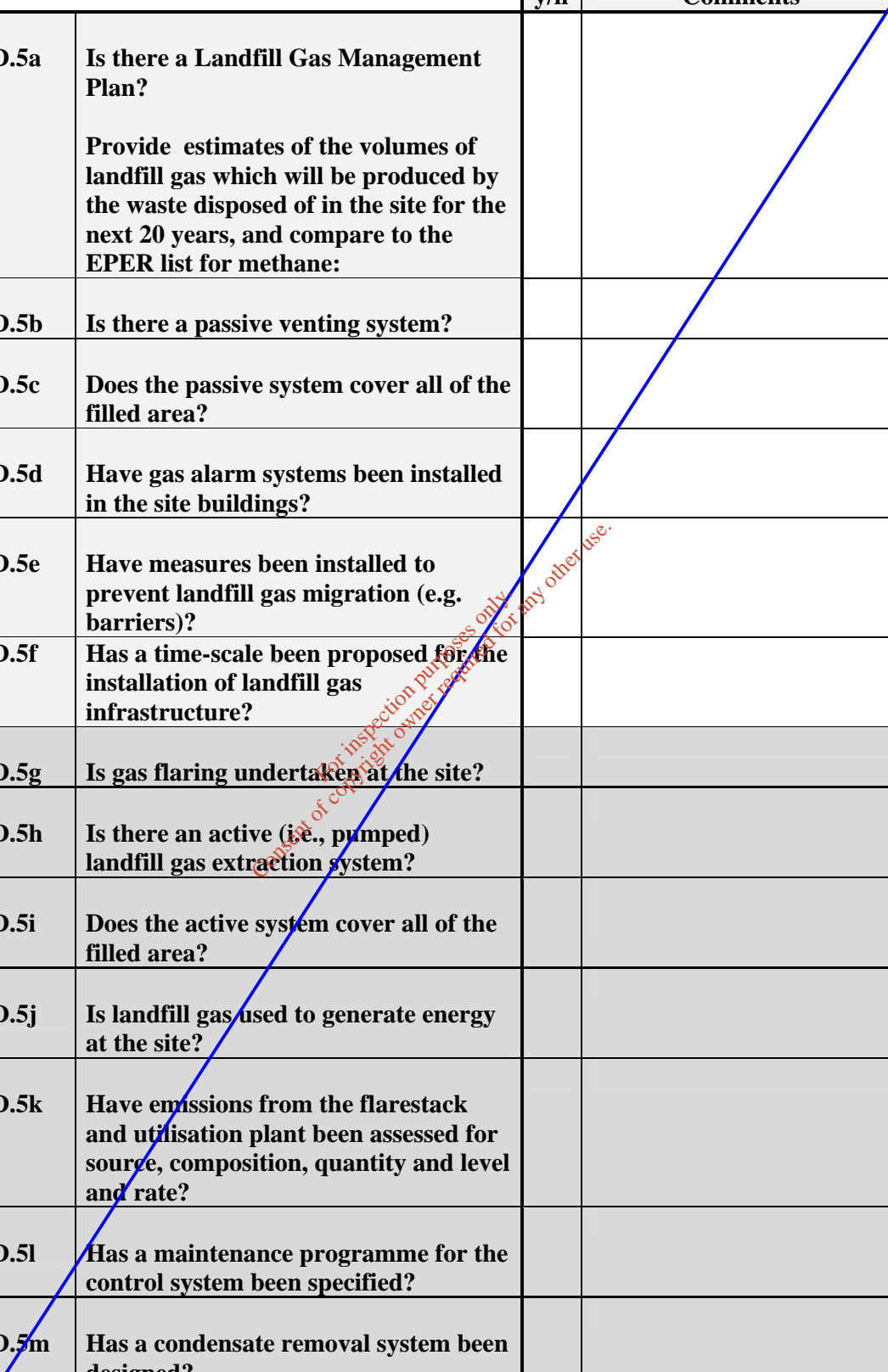
**TABLE D.4.1 LEACHATE MANAGEMENT ARRANGEMENTS**

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

**D 5 Landfill Gas Management**

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

Table D.5. Landfill Gas Management

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

**D.6 Capping System**

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

**Table D.6 Capping System**

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

**SECTION E EMISSIONS**

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

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

***E.1 Emissions to Atmosphere***

Details of all point emissions to atmosphere should be supplied. Table E.1.(i) (for Landfill Gas Flare emissions) must be completed for all landfills with a flare. Complete Table E.1(ii) and E.1(iii) for all 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**

***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**



WASTE Application Form

E.6 Environmental Nuisances

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

TABLE E.6 ENVIRONMENTAL NUISANCES

Bird Control	Control method specified	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	not applicable <input type="checkbox"/>
	Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Dust Control	Control method specified	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
	Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Fire Control	Control method specified	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
	Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Litter Control	Control method specified	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
	Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Traffic Control	Control method specified	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	not applicable <input type="checkbox"/>
	Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Vermin Control	Control method specified	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	not applicable <input type="checkbox"/>
	Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Road Cleansing	Control method specified	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	not applicable <input type="checkbox"/>
	Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>

**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 Attachments F.2 to F.6 and meet the advice published by the Agency in the relevant BAT Note. For Landfills the additional Attachments F.7 to F.8 should be completed. Furthermore for a landfill application the applicant 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.

**F.2 Air**  
- to include Dust, Odour

Monitoring Arrangements specified	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Monitoring points identified, (plus 12-figure grid references)	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>

**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 <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Monitoring points identified, (plus 12-figure grid references)	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>





WASTE Application Form

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 <input type="checkbox"/>	no <input type="checkbox"/>	not applicable <input checked="" type="checkbox"/>
Monitoring points identified, (plus 12-figure grid references)	yes <input type="checkbox"/>	no <input type="checkbox"/>	not applicable <input checked="" type="checkbox"/>
Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>

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 <input type="checkbox"/>	no <input type="checkbox"/>	not applicable <input checked="" type="checkbox"/>
Monitoring points identified, (plus 12-figure grid references)	yes <input type="checkbox"/>	no <input type="checkbox"/>	not applicable <input checked="" type="checkbox"/>
Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>

F.6 Noise

Monitoring Arrangements specified	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Monitoring points identified, (plus 12-figure grid references)	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>

F.7 Meteorological Data

Monitoring Arrangements specified	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	not applicable <input type="checkbox"/>
Monitoring points identified, (plus 12-figure grid references)	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>	not applicable <input type="checkbox"/>
Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>

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

F.8 Leachate

NOT APPLICABLE

Monitoring Arrangements specified	yes <input type="checkbox"/>	no <input type="checkbox"/>	not applicable <input checked="" type="checkbox"/>
Monitoring points identified, (plus 12-figure grid references)	yes <input type="checkbox"/>	no <input type="checkbox"/>	not applicable <input checked="" type="checkbox"/>
Attachment included	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>



WASTE Application Form

**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:

**NOT APPLICABLE**

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

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

Table F.9(b) Landfill Gas Monitoring

Parameter	Proposed Frequency of Analysis	Information Included Y/N	Method of Analysis	Information Included Y/N
	Gas boreholes / vents/ wells/ perimeter locations	Facility Office		
Methane (CH <sub>4</sub> ) % v/v				
Carbon Dioxide (CO <sub>2</sub> ) % v/v				
Oxygen (O <sub>2</sub> ) % v/v				
Atmospheric Pressure				
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				

<b>Monitoring Arrangements specified</b>	yes <input type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
<b>Monitoring points identified, (plus 12-figure grid references)</b>	yes <input type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
<b>Attachment included</b>	yes <input type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>

**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*.

<b>Attachment included</b>	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
----------------------------	---	-----------------------------	---

**G.2 Energy Efficiency**

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

<b>Attachment included</b>	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
----------------------------	---	-----------------------------	---

For inspection purposes only.  
Consent of copyright owner required for any other use.

**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 3rd Schedule (Disposal) Operations		Waste Management Acts 1996 to 2010 4th Schedule (Recovery) Operations	
Class of Activity Applied For	Quantity (tpa)	Class of Activity Applied For	Quantity (tpa)
Class D 1	Not applicable	Class R 1	Not applicable
Class D 2	Not applicable	Class R 2	Not applicable
Class D 3	Not applicable	Class R 3	Not applicable
Class D 4	Not applicable	Class R 4	89,600
Class D 5	Not applicable	Class R 5	Not applicable
Class D 6	Not applicable	Class R 6	Not applicable
Class D 7	Not applicable	Class R 7	Not applicable
Class D 8	Not applicable	Class R 8	Not applicable
Class D 9	Not applicable	Class R 9	Not applicable
Class D 10	Not applicable	Class R 10	Not applicable
Class D 11	Not applicable	Class R 11	Not applicable
Class D 12	Not applicable	Class R 12	Not applicable
Class D 13	Not applicable	Class R 13	400
Class D 14	Not applicable		
Class D 15	Not applicable		

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)
2013 until licensed 1m land raise reached	90,000	None	90,000

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.1 (C).

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

WASTE TYPE	TONNES PER ANNUM (existing)	TONNES PER ANNUM (proposed)	TOTAL (over life of site) tonnes
Household	0 Tonnes/Annum	0 Tonnes/Annum	0 Tonnes
Commercial	0 Tonnes/Annum	0 Tonnes/Annum	0 Tonnes
Sewage Sludge	0 Tonnes/Annum	0 Tonnes/Annum	0 Tonnes
Construction and Demolition	24,900 Tonnes/Annum	90,000 Tonnes/Annum	265,000 (to reach licensed 1m land raise)
Industrial Non-Hazardous Sludges	0 Tonnes/Annum	0 Tonnes/Annum	0 Tonnes
Industrial Non-Hazardous Solids	0 Tonnes/Annum	0 Tonnes/Annum	0 Tonnes
Hazardous *(Specify detail in Table H 1.2)	0 Tonnes/Annum	0 Tonnes/Annum	0 Tonnes
Inert Waste imported for restoration purposes	COMPLETE FOR LANDFILL & CONTAMINATED LAND FACILITIES ONLY		

**\* TABLE H.1.2 HAZARDOUS WASTE TYPES AND QUANTITIES**

HAZARDOUS WASTE	DETAILED DESCRIPTION * REFERENCE SHOULD BE MADE TO THE RELEVANT EUROPEAN WASTE CATALOGUE CODES AS PRESENTED BY COMMISSION DECISION 2000/532/EC	Tonnes Per Annum (Existing)	(Tonnes Per Annum Proposed)
Waste Oil			
Oil filters			
Asbestos			
Paint and Ink			
Batteries	<b>NOT APPLICABLE</b>		
Fluorescent Light Bulbs			
Contaminated Soils			
<b>OTHER HAZARDOUS WASTE (APPLICANT TO SPECIFY)</b>			

**Attachment H.1** should contain any relevant additional information.

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

***H.2 Waste Acceptance Procedures***

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

***H.3 Waste Handling***

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

**In addition, an application for a Landfill requires Section H.3.a to be completed:**

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

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

- (a) a reduction by 16/07/06 to 75% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available;
- (b) a reduction by 16/07/09 to 50% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available;
- (c) a reduction by 16/07/16 to 35% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available;
- (d) Evidence should be provided to show that energy will be used efficiently.

### H.4 Waste Arisings

Waste Arisings should be considered for all contaminated soil applications. Details of all waste materials generated on the site including, name, description and nature as well as the source(s) should be identified. The quantities of each type of waste generated on an annual/monthly basis should be calculated and stated in Tables H.4(i) and H.4(ii) of the application form. Applicants should also provide conversion factors used to relate volume ( $m^3$ ) 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.





## WASTE Application Form

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

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

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

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

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

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

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

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

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

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

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

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

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

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

I.5 Ground and/or groundwater contamination

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

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

I.6 Noise Impact.

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

Ambient noise measurements

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

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



WASTE Application Form

**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**.

<b>Attachment included</b>	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
----------------------------	---	-----------------------------	---

**SECTION K DIATION, 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.

<b>Attachment included</b>	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
----------------------------	---	-----------------------------	---

**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.

<b>Attachment included</b>	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
----------------------------	---	-----------------------------	---

**L.2 Fit and Proper Person**

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

- Indicate whether the applicant or other relevant person has been convicted under the Waste Management Acts 1996 to 2003, the EPA Act 1992 and 2003, the Local Government (Water Pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.
- Provide details of the applicant's technical knowledge and/or qualifications, along with that of other relevant employees (Link to Section C.1 of the application).
- Provide information to show that the person is likely to be in a position to meet any financial commitments or liabilities that may have been or will be entered into or incurred in carrying on the activity to which the application relates or in consequence of ceasing to carry out that activity (Link to Section K of the application).

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

<b>Attachment included</b>	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	not applicable <input type="checkbox"/>
----------------------------	---	-----------------------------	---

---

**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.

Signed by :   
*(on behalf of the organisation)*

Date : 22 / 08 / 12

Print signature name: T. J. Lennon

Position in organisation : m/d

*For inspection purposes only.  
Consent of copyright owner required for any other use.*

Company stamp or seal:



### ANNEX 1 STANDARD FORMS

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

**TABLE E.1(i) LANDFILL GAS FLARE EMISSIONS TO ATMOSPHERE**  
**Emission Point:**

Emission Point Ref. N <sup>o</sup> :	
Location :	
Grid Ref. (12 digit, 6E,6N):	
<b>Vent Details</b>  Diameter:	
Height above Ground(m):	
Date of commencement of emission:	

**Characteristics of Emission:**

CO		mg/m <sup>3</sup>
Total organic carbon (TOC)		mg/m <sup>3</sup>
NO <sub>x</sub>		mg/Nm <sup>3</sup> 0°C. 3% O <sub>2</sub> (Liquid or Gas), 6% O <sub>2</sub> (Solid Fuel)
Maximum volume of emission		m <sup>3</sup> /hr
Temperature	°C(max)	°C(min) °C(avg)

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

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr
---------------------------	-------------------------------------



WASTE Application Form

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

Emission Point Ref. N <sup>o</sup> :	
Source of Emission:	
Location :	
Grid Ref. (12 digit, 6E,6N):	
Vent Details Diameter:	
Height above Ground(m):	
Date of commencement:	

**Characteristics of Emission :**

(i) Volume to be emitted:			
Average/day	m <sup>3</sup> /d	Maximum/day	m <sup>3</sup> /d
Maximum rate/hour	m <sup>3</sup> /h	Min efflux velocity	m.sec <sup>-1</sup>
(ii) Other factors			
Temperature	°C(max)	°C(min)	°C(avg)
For Combustion Sources:			
Volume terms expressed as :	<input type="checkbox"/> wet.	<input type="checkbox"/> dry.	_____ % O <sub>2</sub>

(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
---------------------------	--





WASTE Application Form

**TABLE E.1(iii): MAIN EMISSIONS TO ATMOSPHERE - Chemical characteristics of the emission** (1 table per emission point)

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

Parameter	Prior to treatment <sup>(1)</sup>				Brief description of treatment	As discharged <sup>(1)</sup>					
	mg/Nm <sup>3</sup>		kg/h			mg/Nm <sup>3</sup>		kg/h.		kg/year	
	Avg	Max	Avg	Max		Avg	Max	Avg	Max	Avg	Max
For inspection purposes only. Consent of copyright owner required for any other use.											

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



WASTE Application Form

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

Emission point Reference Numbers	Description	Emission details <sup>1</sup>				Abatement system employed
		material	mg/Nm <sup>3(2)</sup>	kg/h.	kg/year	
<b>Hitachi 200 Excavator</b>	<b>Exhaust from Excavator</b>	<b>Typical Exhaust</b>	-	-	-	<b>Machine to be serviced regularly to reduce exhaust emissions</b>

Consent of copyright owner required for any other use.  
For inspection purposes only.

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°C/101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.

For inspection purposes only.  
Consent of copyright owner required for any other use.



WASTE Application Form

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

**Emission Point:**

Emission Point Ref. N <sup>o</sup> :	<b>EM-SW-1</b>
Source of Emission:	<b>Site Surface Water Drain</b>
Location :	<b>Northwest Corner of Site</b>
Grid Ref. (10 digit, 5E,5N):	<b>E469551.110, N835999.209</b>
Name of receiving waters:	<b>Clooneen River</b>
Flow rate in receiving waters:	<p>_____ m<sup>3</sup>.sec<sup>-1</sup> Dry Weather Flow _____ m<sup>3</sup>.sec<sup>-1</sup> 95%ile flow</p> <p><b>No Hydrometric Information Available on Clooneen River</b></p>
Available waste assimilative capacity:	<p>kg/day</p> <p><b>No Hydrometric Information Available on Clooneen River &amp; Emissions Not Continuous or Consistant</b></p>

For inspection purposes only.  
Consent of Copyright owner required for any other use.



WASTE Application Form

Emission Details:

(i) Volume to be emitted <b>As currently licensed / no change – To allow for rainfall &amp; Site Drainage</b>			
Normal/day	m <sup>3</sup>	Maximum/day	m <sup>3</sup>
Maximum rate/hour	m <sup>3</sup>		

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

Periods of Emission (avg)	_____ min/hr _____ hr/day _____ day/yr <b>As currently licensed / no change – To allow for rainfall &amp; Site Drainage</b>
---------------------------	--



WASTE Application Form

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

**Emission Point:**

Emission Point Ref. N°:	<b>EM-SW-2</b>
Source of Emission:	<b>Site Surface Water Drain</b>
Location :	<b>Northern Boundary of Site</b>
Grid Ref. (10 digit, 5E,5N):	<b>E469651.695, N835941.765</b>
Name of receiving waters:	<b>Clooneen River</b>
Flow rate in receiving waters:	_____ m <sup>3</sup> .sec <sup>-1</sup> Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow <b>No Hydrometric Information Available on Clooneen River</b>
Available waste assimilative capacity:	_____ kg/day <b>No Hydrometric Information Available on Clooneen River &amp; Emissions Not Continuous or Consistant</b>

Consent of copyright owner required for any other use.  
For inspection purposes only.



WASTE Application Form

Emission Details:

(i) Volume to be emitted <b>As currently licensed / no change – To allow for rainfall &amp; Site Drainage</b>			
Normal/day	m <sup>3</sup>	Maximum/day	m <sup>3</sup>
Maximum rate/hour	m <sup>3</sup>		

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

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr <b>As currently licensed / no change – To allow for rainfall &amp; Site Drainage</b>
---------------------------	---

Consent of Copyright Owner Required for any other use.  
For inspection purposes only.



WASTE Application Form

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

**Emission Point:**

Emission Point Ref. N <sup>o</sup> :	<b>EM-SW-3</b>
Source of Emission:	<b>Site Surface Water Drain</b>
Location :	<b>Northern Boundary of Site</b>
Grid Ref. (10 digit, 5E,5N):	<b>E469889.929, N835947.901</b>
Name of receiving waters:	<b>Clooneen River</b>
Flow rate in receiving waters:	_____ m <sup>3</sup> .sec <sup>-1</sup> Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow <b>No Hydrometric Information Available on Clooneen River</b>
Available waste assimilative capacity:	kg/day <b>No Hydrometric Information Available on Clooneen River &amp; Emissions Not Continuous or Consistant</b>

For inspection purposes only.  
Consent of copyright owner required for any other use.





WASTE Application Form

Emission Details:

(i) Volume to be emitted <b>As currently licensed / no change – To allow for rainfall &amp; Site Drainage</b>			
Normal/day	m <sup>3</sup>	Maximum/day	m <sup>3</sup>
Maximum rate/hour	m <sup>3</sup>		

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

Periods of Emission (avg)	_____ min/hr _____ hr/day _____ day/yr <b>As currently licensed / no change – To allow for rainfall &amp; Site Drainage</b>
---------------------------	--

Consent of copyright owner required for any other use.  
For inspection purposes only



WASTE Application Form

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

**Emission Point:**

Emission Point Ref. N <sup>o</sup> :	<b>EM-SW-4</b>
Source of Emission:	<b>Site Surface Water Drain</b>
Location :	<b>Northeast Corner of Site</b>
Grid Ref. (10 digit, 5E,5N):	<b>E470245.848, N835970.331</b>
Name of receiving waters:	<b>Clooneen River</b>
Flow rate in receiving waters:	_____ m <sup>3</sup> .sec <sup>-1</sup> Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow <b>No Hydrometric Information Available on Clooneen River</b>
Available waste assimilative capacity:	kg/day <b>No Hydrometric Information Available on Clooneen River &amp; Emissions Not Continuous or Consistant</b>

For inspection purposes only.  
Consent of copyright owner required for any other use.



WASTE Application Form

Emission Details:

(i) Volume to be emitted <b>As currently licensed / no change – To allow for rainfall &amp; Site Drainage</b>			
Normal/day	m <sup>3</sup>	Maximum/day	m <sup>3</sup>
Maximum rate/hour	m <sup>3</sup>		

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

Periods of Emission (avg)	_____ min/hr _____ hr/day _____ day/yr
	<b>As currently licensed / no change – To allow for rainfall &amp; Site Drainage</b>

Consent of copyright owner required for any other use.  
For inspection purposes only



WASTE Application Form

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

**Emission Point:**

Emission Point Ref. N°:	<b>EM-SW-5</b>
Source of Emission:	<b>Site Surface Water Drain</b>
Location :	<b>Northeast Corner of Site</b>
Grid Ref. (10 digit, 5E,5N):	<b>E470279.007, N835943.645</b>
Name of receiving waters:	<b>Clooneen River</b>
Flow rate in receiving waters:	<p>_____ m<sup>3</sup>.sec<sup>-1</sup> Dry Weather Flow _____ m<sup>3</sup>.sec<sup>-1</sup> 95%ile flow</p> <p><b>No Hydrometric Information Available on Clooneen River</b></p>
Available waste assimilative capacity:	<p>kg/day</p> <p><b>No Hydrometric Information Available on Clooneen River &amp; Emissions Not Continuous or Consistant</b></p>



WASTE Application Form

Emission Details:

(i) Volume to be emitted <b>As currently licensed / no change – To allow for rainfall &amp; Site Drainage</b>			
Normal/day	m <sup>3</sup>	Maximum/day	m <sup>3</sup>
Maximum rate/hour	m <sup>3</sup>		

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

Periods of Emission (avg)	_____ min/hr _____ hr/day _____ day/yr
	<b>As currently licensed / no change – To allow for rainfall &amp; Site Drainage</b>



WASTE Application Form

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

Emission point reference number : Emissions to Surface Water (from Site Surface Water Drains)  
(EMSW-1, EMSW-2, EMSW-3, EMSW-4 & EMSW-5)

For water quality at surface water monitoring points, as discharged, see water quality monitoring, Table I.2.

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
<p>For inspection purposes only. Consent of copyright owner required for any other use.</p> <p><b>SEE WATER QUALITY MONITORING, TABLE I.2</b></p>									



WASTE Application Form

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

NOT APPLICABLE -

Emission Point:

Emission Point Ref. N <sup>o</sup> :	
Location of connection to sewer :	
Grid Ref. (10 digit, 5E,5N):	
Name of sewage undertaker:	

Emission Details:

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

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

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr
---------------------------	-------------------------------------

For inspection purposes only. Consent of copyright owner required for any other use.



WASTE Application Form

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

NOT APPLICABLE -

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

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	

For inspection purposes only.  
Consent of copyright owner required for any other use.



For inspection purposes only.  
Consent of copyright owner required for any other use.



WASTE Application Form

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

**NOT APPLICABLE**

**Emission Point or Area:**

Emission Point/Area Ref. N°:	
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):	
Identity and proximity of surface water bodies at risk:	

*For inspection purposes only.  
Consent of copyright owner required for any other use.*



WASTE Application Form

**Emission Details:**

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

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

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

For inspection purposes only.  
Consent of copyright owner required for any other use.



WASTE Application Form

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

Source	Emission point Ref. No	Equipment Ref. No	Sound Pressure <sup>1</sup> dBA at reference distance	Octave bands (Hz) Sound Pressure <sup>1</sup> Levels dB(unweighted) per band								Impulsive or tonal qualities	Periods of Emission	
				31.5	63	125	250	500	1K	2K	4K			8K
Hitachi 200	-	-	At a distance of 5m =Leq 67.8	59.3	78.9	67.3	63.6	61.8	56.1	51.1	46.0	38.0	Tonal component recorded at 63Hz (external source – not audible during monitoring)	Daytime

For inspection purposes only. Consent of copyright owner required for any other use.

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



WASTE Application Form

**TABLE F.1: ABATEMENT / TREATMENT CONTROL**

**Emission point reference number : Emissions to Surface Water (from Site Surface Water Drains) (EMSW-1, EMSW-2, EMSW-3, EMSW-4 & EMSW-5)**

Control <sup>1</sup> parameter	Equipment <sup>2</sup>	Equipment maintenance	Equipment calibration	Equipment back-up
<b>Water Quality (Suspended Solids)</b>	<b>Settlement Ponds</b>	<b>To be Cleared with Excavator Biannually</b>	<b>Not Required</b>	<b>Not Required</b>

Control <sup>1</sup> parameter	Monitoring to be carried out <sup>3</sup>	Monitoring equipment	Monitoring equipment calibration
<b>Water Quality (Suspended Solids)</b>	<b>Quarterly (i.e. 4 times per annum)</b>	<b>Bucket (Samples to be sent to Laboratory for Analysis)</b>	<b>Not Required (Samples to be sent to Laboratory for Analysis)</b>

<sup>1</sup> List the operating parameters of the treatment / abatement system which control its function.

<sup>2</sup> List the equipment necessary for the proper function of the abatement / treatment system.

<sup>3</sup> List the monitoring of the control parameter to be carried out.



WASTE Application Form

TABLE F.2 to F.8 : EMISSIONS MONITORING AND SAMPLING POINTS - ( 1 table per media)

**AIR – DUST**

Emission Point Reference No(s) : D1, D2 & D3

Parameter	Monitoring frequency	Accessibility of Sampling Points
<b>Settlement Dust (Bergerhoff Method)</b>	<b>Biannually</b>	<b>Easily Accessible (Dust Monitoring Stands in Place)</b>

For inspection purposes only.  
Consent of copyright owner required for any other use.



WASTE Application Form

TABLE F.2 to F.8 : EMISSIONS MONITORING AND SAMPLING POINTS - ( 1 table per media)

**SURFACE WATER**

Emission Point Reference No(s) : SW-1, SW-2, SW-3 SW-4 & SW-5

Parameter	Monitoring frequency	Accessibility of Sampling Points
<b>pH</b>	<b>Quarterly</b>	<b>Easily Accessible</b>
<b>Electrical Conductivity</b>	<b>Quarterly</b>	<b>Easily Accessible</b>
<b>Total Suspended Solids</b>	<b>Quarterly</b>	<b>Easily Accessible</b>
<b>Mineral Oil</b>	<b>Quarterly</b>	<b>Easily Accessible</b>
<b>Total Heavy Metals</b>	<b>Quarterly</b>	<b>Easily Accessible</b>

For inspection purposes only.  
Consent of copyright owner required for any other use.



WASTE Application Form

**TABLE F.2 to F.8 : EMISSIONS MONITORING AND SAMPLING POINTS - ( 1 table per media)**

**NOISE**

Emission Point Reference No(s) : **N1, N2, N3, N4 & N5**

Parameter	Monitoring frequency	Accessibility of Sampling Points
<b>L(A)<sub>eq</sub></b>	<b>As required</b>	<b>Easily Accessible</b>
<b>L(A)<sub>10</sub></b>	<b>As required</b>	<b>Easily Accessible</b>
<b>L(A)<sub>90</sub></b>	<b>As required</b>	<b>Easily Accessible</b>

For inspection purposes only.  
Consent of copyright owner required for any other use.





WASTE Application Form

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

**NOT APPLICABLE**

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

Parameter	Monitoring frequency	Accessibility of Sampling point

For inspection purposes only.  
Consent of copyright owner required for any other use.

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

**NOTE:**

**Diesel/Hydraulic Oil proposed to be used as fuel for Site Plant (Hitachi 200 excavator) and Generator (for Site Portocabin).  
Water to be stored in holding tank for Site Portocabin**

Ref. N <sup>o</sup> or Code	Material/ Substance <sup>(1)</sup>	CAS Number	Danger <sup>(2)</sup> Category	Amount Stored (tonnes)	Annual Usage (tonnes)	Nature of Use	R <sup>(3)</sup> - Phrase	S <sup>(3)</sup> - Phrase
-	Fuel – Diesel	68334-30-5	-	None	5m <sup>3</sup>	Machine/Generator Fuel	R10 R40 R51/53	S2 S36/37 S62
-	Fuel – Hydraulic Oil	N/A	-	None	0.04m <sup>3</sup>	Machine/Generator Fuel	N/A	N/A
-	Water	N/A	-	0.5m <sup>3</sup> (0.5 Tonnes)	3.5m <sup>3</sup> (3.5 Tonnes)	Site Accommodation	N/A	N/A

- Notes:
1. In cases where a material comprises a number of distinct and available dangerous substances, please give details for each component substance.
  2. c.f. Article 2(2) of SI N<sup>o</sup> 77/94
  3. c.f. Schedules 2 and 3 of SI N<sup>o</sup> 77/94



WASTE Application Form

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

NOT APPLICABLE

Waste material	EWC Code	Main source <sup>1</sup>	Quantity		On-site Recovery/Disposal (Method & Location )	Off-site Recovery, reuse or recycling (Method, Location & Undertaker)	Off-site Disposal (Method, Location & Undertaker)
			Tonnes / month	m <sup>3</sup> / month			

For inspection purposes only.  
Consent of copyright owner required for any other use.

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

For inspection purposes only.  
Consent of copyright owner required for any other use.



WASTE Application Form

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

Waste material	EWC Code	Main source <sup>1</sup>	Quantity		On-site recovery/disposal <sup>2</sup> (Method & Location)	Off-site Recovery, reuse or recycling (Method, Location & Undertaker)	Off-site Disposal (Method, Location & Undertaker)
			Tonnes / month	m <sup>3</sup> / month			
Soil & Stones, other than those mentioned in 17 05 03	17 05 04	Soil & Stone excavation Sites in Connaught Region	Up to maximum of approximately 7,500 tonnes/month	Up to maximum of approximately 4,687 m <sup>3</sup> / month, dependent on characteristics of soil/stone received	Onsite Recovery (Spread Out Over Site)	NOT APPLICABLE	NOT APPLICABLE

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

For inspection purposes only. Consent of copyright owner required for any other use.



WASTE Application Form

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

(Sheet 1 of 3) Monitoring Point/ Grid Reference: SW-1 - (E469552.459 N836024.337)

Parameter	Results (mg/l)				Sampling method <sup>2</sup> (grab, drift etc.)	Normal Analytical Range <sup>2</sup>	Analysis method / technique
	Date 08/12/08	Date	Date	Date			
pH	6.1	-	-	-	Grab		
Temperature	-	-	-	-	Grab		
Electrical conductivity EC	339 uS/cm	-	-	-	Grab		
Ammoniacal nitrogen NH <sub>4</sub> -N	0.111 mg/l	-	-	-	Grab		
Chemical oxygen demand	28 mg/l	-	-	-	Grab		
Biochemical oxygen demand	<1 mg/l	-	-	-	Grab		
Dissolved oxygen DO	-	-	-	-	Grab		
Calcium Ca	5 mg/l	-	-	-	Grab		
Cadmium Cd	<0.5 mg/l	-	-	-	Grab		
Chromium Cr	<0.5 mg/l	-	-	-	Grab		
Chloride Cl	82.66 mg/l	-	-	-	Grab		
Copper Cu	<1 ug/l	-	-	-	Grab		
Iron Fe	379 ug/l	-	-	-	Grab		
Lead Pb	<0.5 ug/l	-	-	-	Grab		
Magnesium Mg	6 mg/l	-	-	-	Grab		
Manganese Mn	75 ug/l	-	-	-	Grab		
Mercury Hg	<0.05 ug/l	-	-	-	Grab		

For inspection purposes only. Consent of copyright owner required for any other use.

See page 2 of 3



WASTE Application Form

Surface Water Quality (Sheet 2 of 3) [SW-1 - \(E469552.459 N836024.337\)](#)

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date 08/12/08	Date	Date	Date			
Nickel Ni	<0.5 ug/l	-	-	-	Grab		
Potassium K	3 mg/l	-	-	-	Grab		
Sodium Na	38 mg/l	-	-	-	Grab		
Sulphate SO <sub>4</sub>	15.38 mg/l	-	-	-	Grab		
Zinc Zn	<5 ug/l	-	-	-	Grab		
Total alkalinity (as CaCO <sub>3</sub> )	339 mg/l CaCO <sub>3</sub>	-	-	-	Grab		
Total organic carbon TOC	16.6 mg/l	-	-	-	Grab		
Total oxidised nitrogen TON	0.12 mg/l	-	-	-	Grab		
Nitrite NO <sub>2</sub>	<0.017 mg/l	-	-	-	Grab		
Nitrate NO <sub>3</sub>	0.517 mg/l	-	-	-	Grab		
Faecal coliforms ( /100mls)	33 cfu/100ml	-	-	-	Grab		
Total coliforms ( /100mls)	322 cfu/100ml	-	-	-	Grab		
Phosphate PO <sub>4</sub>	0.251 mg/l	-	-	-	Grab		

For inspection purposes only.  
Consent of copyright owner required for any other use.

See page 3 of 3 for sample of 04/04/2012



WASTE Application Form

Surface Water Quality (Sheet 3 of 3) **SW-1 - (E469552.459 N836024.337)**

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date 08/12/08	Date 04/04/12	Date	Date			
pH	6.1	6.8	-	-	Grab		
Electrical conductivity EC	339 uS/cm	378 uS/cm	-	-	Grab		
Suspended Solids	-	8 mg/l	-	-	Grab		
Mineral oil	-	210 ug/l	-	-	Grab		
Antimony	-	<0.5 ug/l	-	-	Grab		
Arsenic	-	<0.5 ug/l	-	-	Grab		
Beryllium	-	<0.5 ug/l	-	-	Grab		
Cadmium	<0.5 ug/l	<0.5 ug/l	-	-	Grab		
Chromium	<0.5 ug/l	0.5 ug/l	-	-	Grab		
Cobalt	-	<0.5 ug/l	-	-	Grab		
Copper	<1 ug/l	<1 ug/l	-	-	Grab		
Lead	<0.5 ug/l	<0.5 ug/l	-	-	Grab		
Molybdenum	-	<0.5 ug/l	-	-	Grab		
Nickel	<0.5 ug/l	<0.5 ug/l	-	-	Grab		
Selenium	-	<0.5 ug/l	-	-	Grab		
Tellurium	-	<0.5 ug/l	-	-	Grab		
Thallium	-	<0.5 ug/l	-	-	Grab		
Tin	-	<0.5 ug/l	-	-	Grab		
Vanadium	-	0.8 ug/l	-	-	Grab		
Zinc	<5 ug/l	<5 ug/l	-	-	Grab		
Total Heavy Metals	-	1.3 ug/l	-	-	Grab		





WASTE Application Form

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

(Sheet 1 of 3) Monitoring Point/ Grid Reference: SW-2 - (E469898.874 N835978.089)

Parameter	Results (mg/l)				Sampling method <sup>2</sup> (grab, drift etc.)	Normal Analytical Range <sup>2</sup>	Analysis method / technique
	Date 08/12/08	Date	Date	Date			
pH	6.1	-	-	-	Grab	-	-
Temperature	-	-	-	-	Grab	-	-
Electrical conductivity EC	340 uS/cm	-	-	-	Grab	-	-
Ammoniacal nitrogen NH <sub>4</sub> -N	0.090 mg/l	-	-	-	Grab	-	-
Chemical oxygen demand	26 mg/l	-	-	-	Grab	-	-
Biochemical oxygen demand	<1 mg/l	-	-	-	Grab	-	-
Dissolved oxygen DO	-	-	-	-	Grab	-	-
Calcium Ca	5 mg/l	-	-	-	Grab	-	-
Cadmium Cd	<0.5 mg/l	-	-	-	Grab	-	-
Chromium Cr	<0.5 mg/l	-	-	-	Grab	-	-
Chloride Cl	82.50 mg/l	-	-	-	Grab	-	-
Copper Cu	34 ug/l	-	-	-	Grab	-	-
Iron Fe	499 ug/l	-	-	-	Grab	-	-
Lead Pb	<0.5 ug/l	-	-	-	Grab	-	-
Magnesium Mg	6 mg/l	-	-	-	Grab	-	-
Manganese Mn	79 ug/l	-	-	-	Grab	-	-
Mercury Hg	<0.05 ug/l	-	-	-	Grab	-	-

For inspection purposes only. Consent of copyright owner required for any other use.

See page 2 of 3



WASTE Application Form

Surface Water Quality (Sheet 2 of 3) [SW-2 - \(E469898.874 N835978.089\)](#)

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date 08/12/08	Date	Date	Date			
Nickel Ni	1 ug/l	-	-	-	Grab	-	-
Potassium K	3 mg/l	-	-	-	Grab	-	-
Sodium Na	39 mg/l	-	-	-	Grab	-	-
Sulphate SO <sub>4</sub>	15.16 mg/l	-	-	-	Grab	-	-
Zinc Zn	10 ug/l	-	-	-	Grab	-	-
Total alkalinity (as CaCO <sub>3</sub> )	338 mg/l CaCo3	-	-	-	Grab	-	-
Total organic carbon TOC	17.0 mg/l	-	-	-	Grab	-	-
Total oxidised nitrogen TON	0.13 mg/l	-	-	-	Grab	-	-
Nitrite NO <sub>2</sub>	<0.017 mg/l	-	-	-	Grab	-	-
Nitrate NO <sub>3</sub>	0.582 mg/l	-	-	-	Grab	-	-
Faecal coliforms ( /100mls)	89 cfu/100ml	-	-	-	Grab	-	-
Total coliforms ( /100mls)	305 cfu/100ml	-	-	-	Grab	-	-
Phosphate PO <sub>4</sub>	0.231 mg/l	-	-	-	Grab	-	-

See page 3 of 3 for sample of 04/04/2012



WASTE Application Form

Surface Water Quality (Sheet 3 of 3) **SW-2 - (E469898.874 N835978.089)**

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date 08/12/08	Date 04/04/12	Date	Date			
pH	6.1	6.7	-	-	Grab		
Electrical conductivity EC	340 uS/cm	369 uS/cm	-	-	Grab		
Suspended Solids	-	5 mg/l	-	-	Grab		
Mineral oil	-	<100 ug/l	-	-	Grab		
Antimony	-	<0.5 ug/l	-	-	Grab		
Arsenic	-	<0.5 ug/l	-	-	Grab		
Beryllium	-	<0.5 ug/l	-	-	Grab		
Cadmium	<0.5 ug/l	<0.5 ug/l	-	-	Grab		
Chromium	<0.5 ug/l	0.7 ug/l	-	-	Grab		
Cobalt	-	0.6 ug/l	-	-	Grab		
Copper	34 ug/l	<1 ug/l	-	-	Grab		
Lead	<0.5 ug/l	0.8 ug/l	-	-	Grab		
Molybdenum	-	<0.5 ug/l	-	-	Grab		
Nickel	<1 ug/l	<0.5 ug/l	-	-	Grab		
Selenium	-	<0.5 ug/l	-	-	Grab		
Tellurium	-	<0.5 ug/l	-	-	Grab		
Thallium	-	<0.5 ug/l	-	-	Grab		
Tin	-	<0.5 ug/l	-	-	Grab		
Vanadium	-	2 ug/l	-	-	Grab		
Zinc	10 ug/l	<5 ug/l	-	-	Grab		
Total Heavy Metals	-	4.1 ug/l	-	-	Grab		

For inspection purposes only.  
Consent of copyright owner required for any other use.



WASTE Application Form

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

(Sheet 1 of 3) Monitoring Point/ Grid Reference: SW-3 - (E470263.519 N835956.711)

Parameter	Results (mg/l)				Sampling method <sup>2</sup> (grab, drift etc.)	Normal Analytical Range <sup>2</sup>	Analysis method / technique
	Date 08/12/08	Date	Date	Date			
pH	6.1	-	-	-	Grab	-	-
Temperature	-	-	-	-	Grab	-	-
Electrical conductivity EC	327 uS/cm	-	-	-	Grab	-	-
Ammoniacal nitrogen NH <sub>4</sub> -N	0.64 mg/l	-	-	-	Grab	-	-
Chemical oxygen demand	26 mg/l	-	-	-	Grab	-	-
Biochemical oxygen demand	<1 mg/l	-	-	-	Grab	-	-
Dissolved oxygen DO	-	-	-	-	Grab	-	-
Calcium Ca	5 mg/l	-	-	-	Grab	-	-
Cadmium Cd	<0.5 mg/l	-	-	-	Grab	-	-
Chromium Cr	< 0.5 mg/l	-	-	-	Grab	-	-
Chloride Cl	79.14 mg/l	-	-	-	Grab	-	-
Copper Cu	36 ug/l	-	-	-	Grab	-	-
Iron Fe	590 ug/l	-	-	-	Grab	-	-
Lead Pb	<0.5 ug/l	-	-	-	Grab	-	-
Magnesium Mg	6 mg/l	-	-	-	Grab	-	-
Manganese Mn	77 ug/l	-	-	-	Grab	-	-
Mercury Hg	<0.05 ug/l	-	-	-	Grab	-	-

See page 2 of 3



WASTE Application Form

Surface Water Quality (Sheet 2 of 3) **SW-3 - (E470263.519 N835956.711)**

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date 08/12/08	Date	Date	Date			
Nickel Ni	0.7 ug/l	-	-	-	Grab	-	-
Potassium K	3 mg/l	-	-	-	Grab	-	-
Sodium Na	37 mg/l	-	-	-	Grab	-	-
Sulphate SO <sub>4</sub>	14.37 mg/l	-	-	-	Grab	-	-
Zinc Zn	10 ug/l	-	-	-	Grab	-	-
Total alkalinity (as CaCO <sub>3</sub> )	327 mg/l CaCo3	-	-	-	Grab	-	-
Total organic carbon TOC	16.7 mg/l	-	-	-	Grab	-	-
Total oxidised nitrogen TON	0.12 mg/l	-	-	-	Grab	-	-
Nitrite NO <sub>2</sub>	<0.017 mg/l	-	-	-	Grab	-	-
Nitrate NO <sub>3</sub>	0.514 mg/l	-	-	-	Grab	-	-
Faecal coliforms ( /100mls)	51 cfu/100ml	-	-	-	Grab	-	-
Total coliforms ( /100mls)	364 cfu/100ml	-	-	-	Grab	-	-
Phosphate PO <sub>4</sub>	0.188 mg/l	-	-	-	Grab	-	-

For inspection purposes only. Consent of copyright owner required for any other use.

See page 3 of 3 for sample of 04/04/2012



WASTE Application Form

Surface Water Quality (Sheet 3 of 3) **SW-3 - (E470263.519 N835956.711)**

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date 08/12/08	Date 04/04/12	Date	Date			
pH	6.1	6.7	-	-	Grab		
Electrical conductivity EC	327 uS/cm	370 uS/cm	-	-	Grab		
Suspended Solids	-	< 2 mg/l	-	-	Grab		
Mineral oil	-	< 100 ug/l	-	-	Grab		
Antimony	-	<0.5 ug/l	-	-	Grab		
Arsenic	-	<0.5 ug/l	-	-	Grab		
Beryllium	-	<0.5 ug/l	-	-	Grab		
Cadmium	<0.5 ug/l	<0.5 ug/l	-	-	Grab		
Chromium	<0.5 ug/l	0.9 ug/l	-	-	Grab		
Cobalt	-	0.6 ug/l	-	-	Grab		
Copper	36 ug/l	<1 ug/l	-	-	Grab		
Lead	<0.5 ug/l	1 ug/l	-	-	Grab		
Molybdenum	-	<0.5 ug/l	-	-	Grab		
Nickel	0.7 ug/l	<0.5 ug/l	-	-	Grab		
Selenium	-	<0.5 ug/l	-	-	Grab		
Tellurium	-	<0.5 ug/l	-	-	Grab		
Thallium	-	<0.5 ug/l	-	-	Grab		
Tin	-	<0.5 ug/l	-	-	Grab		
Vanadium	-	2 ug/l	-	-	Grab		
Zinc	10 ug/l	6 ug/l	-	-	Grab		
Total Heavy Metals	-	10.5 ug/l	-	-	Grab		

For inspection purposes only.  
Consent of copyright owner required for any other use.





WASTE Application Form

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

(Sheet 1 of 3) Monitoring Point/ Grid Reference: SW-4 - E470245.848, N835970.331

Parameter	Results (mg/l)				Sampling method <sup>2</sup> (grab, drift etc.)	Normal Analytical Range <sup>2</sup>	Analysis method / technique
	Date	Date	Date	Date			
pH	-	-	-	-	Grab	-	-
Temperature	-	-	-	-	Grab	-	-
Electrical conductivity EC	-	-	-	-	Grab	-	-
Ammoniacal nitrogen NH <sub>4</sub> -N	-	-	-	-	Grab	-	-
Chemical oxygen demand	-	-	-	-	Grab	-	-
Biochemical oxygen demand	-	-	-	-	Grab	-	-
Dissolved oxygen DO	-	-	-	-	Grab	-	-
Calcium Ca	-	-	-	-	Grab	-	-
Cadmium Cd	-	-	-	-	Grab	-	-
Chromium Cr	-	-	-	-	Grab	-	-
Chloride Cl	-	-	-	-	Grab	-	-
Copper Cu	-	-	-	-	Grab	-	-
Iron Fe	-	-	-	-	Grab	-	-
Lead Pb	-	-	-	-	Grab	-	-
Magnesium Mg	-	-	-	-	Grab	-	-
Manganese Mn	-	-	-	-	Grab	-	-
Mercury Hg	-	-	-	-	Grab	-	-

For inspection purposes only. Consent of copyright owner required for any reuse.

[See page 3 of 3 for sample of 04/04/2012](#)



WASTE Application Form

Surface Water Quality (Sheet 2 of 3)

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
Nickel Ni	-	-	-	-	Grab	-	-
Potassium K	-	-	-	-	Grab	-	-
Sodium Na	-	-	-	-	Grab	-	-
Sulphate SO <sub>4</sub>	-	-	-	-	Grab	-	-
Zinc Zn	-	-	-	-	Grab	-	-
Total alkalinity (as CaCO <sub>3</sub> )	-	-	-	-	Grab	-	-
Total organic carbon TOC	-	-	-	-	Grab	-	-
Total oxidised nitrogen TON	-	-	-	-	Grab	-	-
Nitrite NO <sub>2</sub>	-	-	-	-	Grab	-	-
Nitrate NO <sub>3</sub>	-	-	-	-	Grab	-	-
Faecal coliforms ( /100mls)	-	-	-	-	Grab	-	-
Total coliforms ( /100mls)	-	-	-	-	Grab	-	-
Phosphate PO <sub>4</sub>	-	-	-	-	Grab	-	-

For inspection purposes only. Consent of copyright owner required for any other use.

[See page 3 of 3 for sample of 04/04/2012](#)



WASTE Application Form

Surface Water Quality (Sheet 3 of 3) **SW-4 - E470245.848, N835970.331**

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date 04/04/12	Date	Date			
pH	-	6.7	-	-	Grab		
Electrical conductivity EC	-	369 uS/cm	-	-	Grab		
Suspended Solids	-	< 2 mg/l	-	-	Grab		
Mineral oil	-	< 100 ug/l	-	-	Grab		
Antimony	-	<0.5 ug/l	-	-	Grab		
Arsenic	-	<0.5 ug/l	-	-	Grab		
Beryllium	-	<0.5 ug/l	-	-	Grab		
Cadmium	-	<0.5 ug/l	-	-	Grab		
Chromium	-	0.8 ug/l	-	-	Grab		
Cobalt	-	0.6 ug/l	-	-	Grab		
Copper	-	<1 ug/l	-	-	Grab		
Lead	-	0.9 ug/l	-	-	Grab		
Molybdenum	-	<0.5 ug/l	-	-	Grab		
Nickel	-	<0.5 ug/l					
Selenium	-	<0.5 ug/l					
Tellurium	-	<0.5 ug/l					
Thallium	-	<0.5 ug/l					
Tin	-	<0.5 ug/l					
Vanadium	-	2 ug/l					
Zinc	-	6 ug/l					
Total Heavy Metals	-	10.3 ug/l					

For inspection purposes only. Consent of copyright owner required for any other use.

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



WASTE Application Form

(Sheet 1 of 3) Monitoring Point/ Grid Reference: SW-5 - E470279.007, N835943.645

Parameter	Results (mg/l)				Sampling method <sup>2</sup> (grab, drift etc.)	Normal Analytical Range <sup>2</sup>	Analysis method / technique
	Date	Date	Date	Date			
pH	-	-	-	-	Grab	-	-
Temperature	-	-	-	-	Grab	-	-
Electrical conductivity EC	-	-	-	-	Grab	-	-
Ammoniacal nitrogen NH <sub>4</sub> -N	-	-	-	-	Grab	-	-
Chemical oxygen demand	-	-	-	-	Grab	-	-
Biochemical oxygen demand	-	-	-	-	Grab	-	-
Dissolved oxygen DO	-	-	-	-	Grab	-	-
Calcium Ca	-	-	-	-	Grab	-	-
Cadmium Cd	-	-	-	-	Grab	-	-
Chromium Cr	-	-	-	-	Grab	-	-
Chloride Cl	-	-	-	-	Grab	-	-
Copper Cu	-	-	-	-	Grab	-	-
Iron Fe	-	-	-	-	Grab	-	-
Lead Pb	-	-	-	-	Grab	-	-
Magnesium Mg	-	-	-	-	Grab	-	-
Manganese Mn	-	-	-	-	Grab	-	-
Mercury Hg	-	-	-	-	Grab	-	-

For inspection purposes only. Consent of copyright owner required for any other use.

[See page 3 of 3 for sample of 04/04/2012](#)



WASTE Application Form

Surface Water Quality (Sheet 2 of 3) [SW-5 - E470279.007, N835943.645](#)

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
Nickel Ni	-	-	-	-	Grab	-	-
Potassium K	-	-	-	-	Grab	-	-
Sodium Na	-	-	-	-	Grab	-	-
Sulphate SO <sub>4</sub>	-	-	-	-	Grab	-	-
Zinc Zn	-	-	-	-	Grab	-	-
Total alkalinity (as CaCO <sub>3</sub> )	-	-	-	-	Grab	-	-
Total organic carbon TOC	-	-	-	-	Grab	-	-
Total oxidised nitrogen TON	-	-	-	-	Grab	-	-
Nitrite NO <sub>2</sub>	-	-	-	-	Grab	-	-
Nitrate NO <sub>3</sub>	-	-	-	-	Grab	-	-
Faecal coliforms ( /100mls)	-	-	-	-	Grab	-	-
Total coliforms ( /100mls)	-	-	-	-	Grab	-	-
Phosphate PO <sub>4</sub>	-	-	-	-	Grab	-	-

For inspection purposes only.  
Consent of copyright owner required for any other use.

[See page 3 of 3 for sample of 04/04/2012](#)



WASTE Application Form

Surface Water Quality (Sheet 3 of 3) **SW-5 - E470279.007, N835943.645**

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date 04/04/12	Date	Date			
pH	-	6.7	-	-	Grab		
Electrical conductivity EC	-	370 uS/cm	-	-	Grab		
Suspended Solids	-	5 mg/l	-	-	Grab		
Mineral oil	-	132 ug/l	-	-	Grab		
Antimony	-	<0.5 ug/l	-	-	Grab		
Arsenic	-	<0.5 ug/l	-	-	Grab		
Beryllium	-	<0.5 ug/l	-	-	Grab		
Cadmium	-	<0.5 ug/l	-	-	Grab		
Chromium	-	0.8 ug/l	-	-	Grab		
Cobalt	-	0.6 ug/l	-	-	Grab		
Copper	-	<1 ug/l	-	-	Grab		
Lead	-	0.6 ug/l	-	-	Grab		
Molybdenum	-	<0.5 ug/l	-	-	Grab		
Nickel	-	<0.5 ug/l	-	-			
Selenium	-	<0.5 ug/l	-	-			
Tellurium	-	<0.5 ug/l	-	-			
Thallium	-	<0.5 ug/l	-	-			
Tin	-	<0.5 ug/l	-	-			
Vanadium	-	2 ug/l	-	-			
Zinc	-	<5 ug/l	-	-			
Total Heavy Metals	-	4 ug/l	-	-			



WASTE Application Form

**Table I.4(i) GROUNDWATER QUALITY**

**NOT APPLICABLE -**

There are no Emissions to Groundwater (existing or proposed) from the site,  
Therefore, an 'Assessment of Impact of Ground/Groundwater Emissions' is not required.

(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			
pH							
Temperature							
Electrical conductivity EC							
Ammoniacal nitrogen NH <sub>4</sub> -N							
Dissolved oxygen DO							
Residue on evaporation (180°C)							
Calcium Ca							
Cadmium Cd							
Chromium Cr							
Chloride Cl							
Copper Cu							
Cyanide Cn, total							
Iron Fe							
Lead Pb							
Magnesium Mg							
Manganese Mn							
Mercury Hg							
Nickel Ni							
Potassium K							
Sodium Na							

For inspection purposes only. Consent of copyright owner required for any other use.



WASTE Application Form

GROUNDWATER QUALITY (SHEET 2 OF 2)

**NOT APPLICABLE -**

There are no Emissions to Groundwater (existing or proposed) from the site,  
Therefore, an 'Assessment of Impact of Ground/Groundwater Emissions' is not required

Parameter	Results (mg/l)				Sampling method (composite, dipper etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
Phosphate PO <sub>4</sub>							
Sulphate SO <sub>4</sub>							
Zinc Zn							
Total alkalinity (as CaCO <sub>3</sub> )							
Total organic carbon TOC							
Total oxidised nitrogen TON							
Arsenic As							
Barium Ba							
Boron B							
Fluoride F							
Phenol							
Phosphorus P							
Selenium Se							
Silver Ag							
Nitrite NO <sub>2</sub>							
Nitrate NO <sub>3</sub>							
Faecal coliforms (/100mls)							
Total coliforms (/100mls)							
Water level (m OD)							

For inspection purposes only.  
Consent of copyright owner required for any other use.



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

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

	National Grid Reference	Sound Pressure Levels		
	(5N, 5E)	L(A) <sub>eq</sub>	L(A) <sub>10</sub>	L(A) <sub>90</sub>
<b>1. SITE BOUNDARY</b>				
Location 1: N1	83568, 46948	37.9	39.3	35.4
Location 2: N2	83572, 46996	55.1	57.9	45.6
Location 3: N3	83592, 47023	38.9	40.9	35.4
Location 4:				
<b>2. NOISE SENSITIVE LOCATIONS</b>				
Location 1: N4	83665, 47024	48.1	41.9	34.2
Location 2: N5	83509, 46974	56.9	60.6	36.1
<b>2. SITE BOUNDARY</b>				

NOTE: All locations should be identified on accompanying drawings.

For inspection purposes only.  
Consent of copyright owner required for any other use.