BioPower
Limited

Office of Climate, Licensing & Resource Use,
Environmental Protection Agency,
P0 Box 3000,
Johnstown Caste Estate,
Co. Wexford

30 December 2009

**RE: Waste Licence Application for facility at Ballinphuill, Tibohine, Castlerea, Co Roscommon**

Dear Sir / Madam,

Please find enclosed the following documentation for waste licence application for proposed anaerobic digestion facility at Ballinphuill, Tibohine, Castlerea, Co Roscommon:

- 3 hardcopies copies of the application form (1 original and 2 copies)
- 3 hardcopies copies of the waste licence attachments (1 original and 2 copies)
- 3 hardcopies copies of the Environmental Impact Statement (1 original and 2 copies)
- 2 electronic copies of all of the waste licence application documents and drawings in searchable PDF format
- 16 electronic copies of all of the EIS documents and figures in searchable PDF format
- Application Fee €10,000



Please can you send all correspondence in relation to this application to Mr. Tony Dineen, BioPower Ltd, 48 Main Street, Schull, Co. Cork.

Yours faithfully


# Waste Licence Application Form



| **EPA Ref. Nº:** *(Office use only)* | |
|---|---|

*This document does not purport to be and should not be considered a legal interpretation of the provisions and requirements of the Waste Management Acts 1996 to 2003.*

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

# Environmental Protection Agency
Application for a Waste Licence

**WASTE MANAGEMENT ACTS 1996 to 2003**

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**ANNEX 1: STANDARD FORMS**

## INTRODUCTION

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

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

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

When it is found necessary, additional information may be provided on supplementary attachments which should be 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** | Section B.1 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section B.3 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Not Applicable | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section B.2 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Sections D & H | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section B.7 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section H | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section G | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section D | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section L | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section E | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section E | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section F | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |



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

| | | |
|---|---|---|
| **LOCATION** | Section H.4 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section H.4 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section J | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Section K | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

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

| | | |
|---|---|---|
| **LOCATION** | Not Applicable | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Not Applicable | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |



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

| | | |
|---|---|---|
| **LOCATION** | Section B.8 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Not Applicable | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Attachment A | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

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

| | | |
|---|---|---|
| **LOCATION** | Attachment B.6 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Attachment B.6 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Attachment B.3 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |



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

| | | |
|---|---|---|
| **LOCATION** | Attachment B.6 | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Attachment E | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **LOCATION** | Attachment F | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **INCLUDED Y/N** | Y | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

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

| | | |
|---|---|---|
| **HARDCOPIES PROVIDED Y/N** | Y | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |

| | | |
|---|---|---|
| **CD OF PDF FILES PROVIDED? Y/N** | Y | |
| **CHECKED** | **Applicant** ☒ | **Official** ☐ |



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

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

## PROCEDURES

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

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

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

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



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

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

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.**

## 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**.

See Attachment A.1 Non Technical Summary

## SECTION B GENERAL

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

| | |
|---|---|
| **Name*:** | ADPower Roscommon Ltd |
| **Address:** | Ballinphuill, Tibohine, Castlerea, Co Roscommon |
| | |
| | |
| | |
| **Tel:** | 028 27837 |
| **Fax:** | Not Applicable |
| **e-mail:** | info@biopower.net |

* 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:** | Tony Dineen |
| **Address:** | BioPower Ltd |
| | 48 Main Street |
| | Schull |
| | Co Cork |
| **Tel:** | +353 28 27837 |
| **Fax:** | Not Applicable |
| **e-mail:** | tdineen@biopower.net |



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

| | |
|---|---|
| **Address:** | ADPower Roscommon Ltd |
| | Ballinphuill, Tibohine, Castlerea, Co Roscommon |
| | |
| | |
| **Tel:** | 028 27837 |
| **Fax:** | Not Applicable |
| **e-mail:** | info@biopower.net |

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

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

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

| | |
|---|---|
| **Landowner** | ☐ |
| **Lessee** | ☐ |
| **Prospective Purchaser** | ☒ |
| **Other (please specify)** | |

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

**Name:** Not Applicable
**Address:**

**Tel:**
**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:** Kevin Flynn
**Address:** Rathra House, Tibohine, Frenchpark, Co Roscommon

**Tel:**
**Fax:** Not Applicable
**e-mail:** Not Applicable
*Current at the time the application is submitted



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

**Name:** ADPower Roscommon Ltd
**Address*:** Ballinphuill, Tibohine, Castlerea, Co Roscommon

**Tel:** 028 27837
**Fax:** Not Applicable
**e-mail:** info@biopower.net
* Include any townland

| | |
|---|---|
| **National Grid Reference (8 digit 4E,4N)** | 1666E, 2935N |

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:** | Roscommon County Council |
| **Address:** | Roscommon County Council, The Courthouse, |
| | Roscommon, Co Roscommon |
| | |
| | |
| **Tel:** | 090 6637100 |
| **Fax:** | Not Applicable |

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

| | |
|---|---|
| ***Planning Authority notified*** | **Yes** ☒ |
| | **No** ☐ |



Planning Permission relating to this application:-

| | |
|---|---|
| ***has been obtained*** | ☒ |
| ***is being processed*** | ☐ |
| ***is not yet applied for*** | ☐ |
| ***is not required*** | ☐ |

| | |
|---|---|
| ***Local Authority Planning File Reference N$^{o}$:*** | 08/656 |

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

### *B.4 Sanitary Authority*

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:** | Not Applicable |
| **Address:** | |
| | |
| | |
| | |
| **Tel:** | |
| **Fax:** | |

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

### *B.5 Other Authorities*

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

| | | |
|---|---|---|
| **Within SFADCo. Area** | **Yes** ☐ | **No** ☒ |

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

| | |
|---|---|
| **Name:** | Western Health Board |
| **Address:** | Environmental Health Centre, |
| | Ballaghadereen, |
| | Co Roscommon |
| **Tel:** | 094 9860639 |
| **Fax:** | 094 9860450 |



### *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 (≤A3) showing its location on site. **The original application must include the complete newspaper in which the advertisement was placed**. The relevant page of the newspaper containing the advertisement should be included with the original and three copies of the application.

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

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

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

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

| Waste Management Acts 1996 to 2003 | | | |
|---|---|---|---|
| **THIRD SCHEDULE<br>Waste Disposal Activities** | **Y/N** | **FOURTH SCHEDULE<br>Waste Recovery Activities** | **Y/N** |
| 1. Deposit on, in or under land (including landfill). | N | 1. Solvent reclamation or regeneration. | N |
| 2. Land treatment, including biodegradation of liquid or sludge discards in soils. | N | 2. Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes). | P |
| 3. Deep injection of the soil, including injection of pumpable discards into wells, salt domes or naturally occurring repositories. | N | 3. Recycling or reclamation of metals and metal compounds. | N |
| 4. Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons. | N | 4. Recycling or reclamation of other inorganic materials. | N |
| 5. Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment. | N | 5. Regeneration of acids or bases. | N |
| 6. Biological treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 5 or paragraphs 7 to 10 of this Schedule. | N | 6. Recovery of components used for pollution abatement. | N |
| 7. Physico-chemical treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 5 or paragraphs 8 to 10 of this Schedule (including evaporation, drying and calcination). | N | 7. Recovery of components from catalysts. | N |
| 8. Incineration on land or at sea. | N | 8. Oil re-refining or other re-uses of oil. | N |
| 9. Permanent storage, including emplacement of containers in a mine. | N | 9. Use of any waste principally as a fuel or other means to generate energy. | Y |
| 10. Release of waste into a water body (including a seabed insertion). | N | 10. The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system. | N |
| 11. Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule. | N | 11. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule. | N |
| 12. Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule. | N | 12. Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule. | N |
| 13. Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced. | N | 13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced. | Y |

### TABLE B.7.2 MAXIMUM ANNUAL TONNAGE

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

| | |
|---|---|
| **Maximum Annual Tonnage (tpa)** | 24,999 |
| **Year** | 2012 |

### 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) | |
| Recovery of Waste (4) | €10,000 |
| | |



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

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

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

### B.8 SEVESO II DIRECTIVE

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

| | | |
|---|---|---|
| **Regulations Apply** | Yes ☐ | No ☒ |

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

## SECTION C MANAGEMENT OF THE FACILITY

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

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

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

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

| Name | Position | Duties and Responsibilities | Experience /Qualifications |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

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

### *D.2 Facility Operation*

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

| | | | |
|---|---|---|---|
| **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |

**LANDFILLS**

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

**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** | **Is there a Landfill Gas Management Plan?**<br><br>**Provide estimates of the volumes of landfill gas which will be produced by the waste disposed of in the site for the next 20 years, and compare to the EPER list for methane:** | | |
| **D.5b** | **Is there a passive venting system?** | | |
| **D.5c** | **Does the passive system cover all of the filled area?** | | |
| **D.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**

### *E.6 Environmental Nuisances*

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

**TABLE E.6 ENVIRONMENTAL NUISANCES**

| | | | | |
|---|---|---|---|---|
| Bird Control | **Control method specified** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| | **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| Dust Control | **Control method specified** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| | **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| Fire Control | **Control method specified** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| | **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| Litter Control | **Control method specified** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| | **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| Traffic Control | **Control method specified** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| | **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| Vermin Control | **Control method specified** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| | **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| Road Cleansing | **Control method specified** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| | **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |

## SECTION F CONTROL & MONITORING

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

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

For each Emission Point identified complete Table F.1 of the Annex, and include detailed descriptions and appropriately scaled schematics (≤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** ☒ | **no** ☐ | **not applicable** ☐ |
| **Monitoring points identified, (plus 12-figure grid references)** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
| **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |

***F.3 Surface Water***

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

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

### *F.4 Sewer Discharge*

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

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

### *F.5 Groundwater*

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

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

### *F.6 Noise*

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



### *F.7 Meteorological Data*

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

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

### *F.8 Leachate*

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

### *F.9 Landfill Gas*

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

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

| **Parameter** | Concentration ($mg/Nm^3$) | Proposed Frequency of Analysis | Information Included Y/N | Method of Analysis | Information Included Y/N |
|---|---|---|---|---|---|
| **Inlet** | | | | | |
| Methane ($CH_4$) % v/v | | | | | |
| Carbon dioxide ($CO_2$) %v/v | | | | | |
| Oxygen ($O_2$) % v/v | | | | | |
| **Outlet** | | | | | |
| Volumetric Flow Rate | | | | | |
| $SO_2$ | | | | | |
| Nox | | | | | |
| CO | | | | | |
| Particulates | | | | | |
| TA Luft Class I, II, III organics | | | | | |
| Hydrochloric acid | | | | | |
| 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 ($CH_4$ ) % v/v** | | | | | |
| **Carbon Dioxide ($CO_2$) % v/v** | | | | | |
| **Oxygen ($O_2$) % 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 | | | | |
| | | | | |
| | | | | |
| | | | | |

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

## SECTION G RESOURCES USE & ENERGY EFFICIENCY

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

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

| | |
|---|---|
| **Attachment included** | **yes** ☒ **no** ☐ **not applicable** ☐ |

### *G.2 Energy Efficiency*

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

| | |
|---|---|
| **Attachment included** | **yes** ☒ **no** ☐ **not applicable** ☐ |

## 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 Act 3rd Schedule (Disposal) Activities | | | Waste Management Act 4th Schedule (Recovery) Activities | | |
|---|---|---|---|---|---|
| Class of Activity Applied For | | Quantity (tpa) | Class of Activity Applied For | | Quantity (tpa) |
| Class 1 | | | Class 1 | | |
| Class 2 | | | Class 2 | | 24,999 |
| Class 3 | | | Class 3 | | |
| Class 4 | | | Class 4 | | |
| Class 5 | | | Class 5 | | |
| Class 6 | | | Class 6 | | |
| Class 7 | | | Class 7 | | |
| Class 8 | | | Class 8 | | |
| Class 9 | | | Class 9 | | 24,999 |
| Class 10 | | | Class 10 | | |
| Class 11 | | | Class 11 | | |
| Class 12 | | | Class 12 | | |
| Class 13 | | | Class 13 | | 24,999 |



*Note all the classes marked are interlinked and the maximum throughput is expected to relate to each of the classes marked above during the anaerobic digestion process.*

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) |
|---|---|---|---|
| 2010 | 15,000 | | 15,000 |
| 2011 | 20,000 | | 20,000 |
| 2012 | 24,999 | | 24,999 |
| | | | |

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 – over 20yrs |
|---|---|---|---|
| **Household** | | 20,000 | 400,000 |
| **Commercial** | | | |
| **Sewage Sludge** | | 2,499 | 49,980 |
| **Construction and Demolition** | | | |
| **Industrial Non-Hazardous Sludges** | | 2,500 | 50,000 |
| **Industrial Non-Hazardous Solids** | | | |
| **Hazardous**<br>***(Specify detail in Table H 1.2)** | | | |
| **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<br>* REFERENCE SHOULD BE MADE TO THE RELEVANT EUROPEAN WASTE CATALOGUE CODES AS PRESENTED BY COMMISSION DECISION 2000/532/EC | Tonnes Per Annum (Existing) | (Tonnes Per Annum Proposed) |
|---|---|---|---|
| **Waste Oil** | | | |
| **Oil filters** | | | |
| **Asbestos** | | | |
| **Paint and Ink** | | | |
| **Batteries** | | | |
| **Fluorescent Light Bulbs** | | | |
| **Contaminated Soils** | | | |
| **OTHER HAZARDOUS WASTE (APPLICANT TO SPECIFY)** | | | |
| | | | |

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

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

### *H.2 Waste Acceptance Procedures*

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

### *H.3 Waste Handling*

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



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

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

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

(a) a reduction by 16/07/06 to 75% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available;

(b) a reduction by 16/07/09 to 50% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available;

(c) a reduction by 16/07/16 to 35% by weight of the total amount of biodegradable municipal waste produced in 1995 or the latest year before 1995 for which standardised Eurostat data is available;

(d) Evidence should be provided to show that energy will be used efficiently.

### H.4 Waste Arisings

Waste Arisings should be considered for all contaminated soil applications. Details of all waste materials generated on the site including, name, description and nature as well as the source(s) should be identified. The quantities of each type of waste

generated on an annual/monthly basis should be calculated and stated in Tables H.1(i) and H. 1(ii) of the application form. Applicants should also provide conversion factors used to relate volume ($m^3$) 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.

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 (≤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 (≤ A3), diagrams and supporting documents, including details of noise attenuation and noise proposed control measures to be employed, should form **Attachment I.6.**

I.7 Assessment of Ecological Impacts & Mitigation Measures

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

## SECTION J ACCIDENT PREVENTION & EMERGENCY RESPONSE



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

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

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

Supporting information should form **Attachment J.**

| **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
|---|---|---|---|

## SECTION K REMEDIATION, DECOMMISSIONING, RESTORATION AND AFTERCARE

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

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

| | |
|---|---|
| **Attachment included** | **yes** ☒ **no** ☐ **not applicable** ☐ |

## SECTION L STATUTORY REQUIREMENTS

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

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

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

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



| | |
|---|---|
| **Attachment included** | **yes** ☒ **no** ☐ **not applicable** ☐ |

### *L.2 Fit and Proper Person*

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

- Indicate whether the applicant or other relevant person has been convicted under the Waste Management Acts 1996 to 2003, the EPA Act 1992 and 2003, the Local Government (Water Pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.

- Provide details of the applicant's technical knowledge and/or qualifications, along with that of other relevant employees (Link to Section C.1 of the application).

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

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

| **Attachment included** | **yes** ☒ | **no** ☐ | **not applicable** ☐ |
|---|---|---|---|

## 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 :** _____ **Date :** 30/12/09
*(on behalf of the organisation)*

**Print signature name:** TONY QUEEN

**Position in organisation :** PROJECT MANAGER.

*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$^{o}$: | |
| Location : | |
| Grid Ref. (12 digit, 6E,6N): | |
| **Vent Details**<br>Diameter:<br>Height above Ground(m): | |
| Date of commencement of emission: | |



**Characteristics of Emission:**

| | | | | |
|---|---|---|---|---|
| CO | | | | mg/m$^3$ |
| Total organic carbon (TOC) | | | | mg/m$^3$ |
| NOx | | | | mg/Nm$^3$<br>0$^{o}$C. 3% $O_2$(Liquid or Gas), 6% $O_2$(Solid Fuel) |
| Maximum volume of emission | | | | m$^3$/hr |
| Temperature | | $^{o}$C(max) | $^{o}$C(min) | $^{o}$C(avg) |

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

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

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

| | |
|---|---|
| Emission Point Ref. N$^{o}$: | |
| Source of Emission: | |
| Location : | |
| Grid Ref. (12 digit, 6E,6N): | |
| Vent Details<br>Diameter:<br><br>Height above Ground(m): | |
| Date of commencement: | |

**Characteristics of Emission :**



| | | | |
|---|---|---|---|
| (i) Volume to be emitted: | | | |
| Average/day | $m^3/d$ | Maximum/day | $m^3/d$ |
| Maximum rate/hour | $m^3/h$ | Min efflux velocity | $m.sec^{-1}$ |
| (ii) Other factors | | | |
| Temperature | $^{o}C$(max) | $^{o}C$(min) | $^{o}C$(avg) |
| For Combustion Sources:<br>Volume terms expressed as : ☐ wet. ☐ dry. _____$\%O_2$ | | | |

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

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

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

***Emission Point Reference Number:*** _____

| Parameter | Prior to treatment(1) | | | | Brief description of treatment | As discharged(1) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/Nm$^3$ | | kg/h | | | mg/Nm$^3$ | | kg/h. | | kg/year | |
| | Avg | Max | Avg | Max | | Avg | Max | Avg | Max | Avg | Max |
| | | | | | | | | | | | |



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

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

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



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$^{o}$C101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.

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

**Emission Point:**

| | |
|---|---|
| Emission Point Ref. N$^{o}$: | |
| Source of Emission: | |
| Location : | |
| Grid Ref. (10 digit, 5E,5N): | |
| Name of receiving waters: | |
| Flow rate in receiving waters: | _____ $m^3.sec^{-1}$ Dry Weather Flow<br>_____ $m^3.sec^{-1}$ 95%ile flow |
| Available waste assimilative capacity: | kg/day |



**Emission Details:**

| |
|---|
| (i) Volume to be emitted |

| | | | |
|---|---|---|---|
| Normal/day | $m^3$ | Maximum/day | $m^3$ |
| Maximum rate/hour | $m^3$ | | |

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

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

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

***Emission point reference number :*** _____

| 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 | |
| | | | | | | | | | |

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

**Emission Point:**

| | |
|---|---|
| Emission Point Ref. N$^{o}$: | |
| Location of connection to sewer : | |
| Grid Ref. (10 digit, 5E,5N): | |
| Name of sewage undertaker: | |

**Emission Details:**

| (i) Volume to be emitted | | | |
|---|---|---|---|
| Normal/day | $m^3$ | Maximum/day | $m^3$ |
| Maximum rate/hour | $m^3$ | | |

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

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

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

***Emission point reference number :*** _____

| Parameter | Prior to treatment | | | | As discharged | | | | % Efficiency |
|---|---|---|---|---|---|---|---|---|---|
| | Max. hourly average (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 | |
| | | | | | | | | | |

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

### Emission Point or Area:

| | |
|---|---|
| Emission Point/Area Ref. Nº: | |
| 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: | |

## Emission Details:

| (i) Volume to be emitted | | | |
|---|---|---|---|
| Normal/day | $m^3$ | Maximum/day | $m^3$ |
| Maximum rate/hour | $m^3$ | | |

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

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

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

| Source | Emission point Ref. No | Equipment Ref. No | Sound Pressure[1] dBA at reference distance | Octave bands (Hz) Sound Pressure[1] Levels dB(unweighted) per band | | | | | | | | | Impulsive or tonal qualities | Periods of Emission |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 31.5 | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

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

## TABLE F.1: ABATEMENT / TREATMENT CONTROL

***Emission point reference number :*** _____

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

| Control[1] parameter | Monitoring to be carried out[3] | Monitoring equipment | Monitoring equipment calibration |
|---|---|---|---|
| | | | |



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

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

***Emission Point Reference No(s). :*** _____

| Parameter | Monitoring frequency | Accessibility of Sampling Points |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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

***Monitoring Point Reference No*** :_____

| Parameter | Monitoring frequency | Accessibility of Sampling point |
|---|---|---|
| | | |

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

| Ref. Nº or Code | Material/ Substance[1] | CAS Number | Danger[2] Category | Amount Stored (tonnes) | Annual Usage (tonnes) | Nature of Use | R[3] - Phrase | S[3] - Phrase |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

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 Nº 77/94
3. c.f. Schedules 2 and 3 of SI Nº 77/94

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

| Waste material | EWC Code | Main source[1] | Quantity | | On-site Recovery/Disposal | Off-site Recovery, reuse or recycling | Off-site Disposal |
|---|---|---|---|---|---|---|---|
| | | | Tonnes / month | $m^3$ / month | (Method & Location ) | (Method, Location & Undertaker) | (Method, Location & Undertaker) |
| | | | | | | | |



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

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

| Waste material | EWC Code | Main source[1] | Quantity | | On-site recovery/disposal[2] (Method & Location) | Off-site Recovery, reuse or recycling (Method, Location & Undertaker) | Off-site Disposal (Method, Location & Undertaker) |
|---|---|---|---|---|---|---|---|
| | | | Tonnes / month | $m^3$ / month | | | |
| | | | | | | | |

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

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

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

| Parameter | Results (mg/l) | | | | Sampling method[2] (grab, drift etc.) | Normal Analytical Range[2] | Analysis method / technique |
|---|---|---|---|---|---|---|---|
| | Date | Date | Date | Date | | | |
| **pH** | | | | | | | |
| **Temperature** | | | | | | | |
| **Electrical conductivity EC** | | | | | | | |
| **Ammoniacal nitrogen $NH_4$-N** | | | | | | | |
| **Chemical oxygen demand** | | | | | | | |
| **Biochemical oxygen demand** | | | | | | | |
| **Dissolved oxygen DO** | | | | | | | |
| **Calcium Ca** | | | | | | | |
| **Cadmium Cd** | | | | | | | |
| **Chromium Cr** | | | | | | | |
| **Chloride Cl** | | | | | | | |
| **Copper Cu** | | | | | | | |
| **Iron Fe** | | | | | | | |
| **Lead Pb** | | | | | | | |
| **Magnesium Mg** | | | | | | | |
| **Manganese Mn** | | | | | | | |
| **Mercury Hg** | | | | | | | |

**Surface Water Quality (Sheet 2 of 2)**

| Parameter | Results (mg/l) | | | | Sampling method (grab, drift etc.) | Normal Analytical Range | Analysis method / technique |
|---|---|---|---|---|---|---|---|
| | Date | Date | Date | Date | | | |
| **Nickel Ni** | | | | | | | |
| **Potassium K** | | | | | | | |
| **Sodium Na** | | | | | | | |
| **Sulphate $SO_4$** | | | | | | | |
| **Zinc Zn** | | | | | | | |
| **Total alkalinity (as $CaCO_3$)** | | | | | | | |
| **Total organic carbon TOC** | | | | | | | |
| **Total oxidised nitrogen TON** | | | | | | | |
| **Nitrite $NO_2$** | | | | | | | |
| **Nitrate $NO_3$** | | | | | | | |
| **Faecal coliforms ( /100mls)** | | | | | | | |
| **Total coliforms ( /100mls)** | | | | | | | |
| **Phosphate $PO_4$** | | | | | | | |

## Table I.4(i) GROUNDWATER QUALITY

**(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 $NH_4$-N | | | | | | | |
| Dissolved oxygen DO | | | | | | | |
| Residue on evaporation (180$^o$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 | | | | | | | |

**GROUNDWATER QUALITY (SHEET 2 OF 2)**

| Parameter | Results (mg/l) | | | | Sampling method (composite, dipper etc.) | Normal Analytical Range | Analysis method / technique |
|---|---|---|---|---|---|---|---|
| | Date | Date | Date | Date | | | |
| Phosphate $PO_4$ | | | | | | | |
| Sulphate $SO_4$ | | | | | | | |
| Zinc Zn | | | | | | | |
| Total alkalinity (as $CaCO_3$) | | | | | | | |
| Total organic carbon TOC | | | | | | | |
| Total oxidised nitrogen TON | | | | | | | |
| Arsenic As | | | | | | | |
| Barium Ba | | | | | | | |
| Boron B | | | | | | | |
| Fluoride F | | | | | | | |
| Phenol | | | | | | | |
| Phosphorus P | | | | | | | |
| Selenium Se | | | | | | | |
| Silver Ag | | | | | | | |
| Nitrite $NO_2$ | | | | | | | |
| Nitrate $NO_3$ | | | | | | | |
| Faecal coliforms ( /100mls) | | | | | | | |
| Total coliforms ( /100mls) | | | | | | | |
| Water level (m OD) | | | | | | | |

## 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) | $L(A)_{eq}$ | $L(A)_{10}$ | $L(A)_{90}$ |
| **1. SITE BOUNDARY** | | | | |
| **Location 1:** | | | | |
| **Location 2:** | | | | |
| **Location 3:** | | | | |
| **Location 4:** | | | | |
| **2. NOISE SENSITIVE LOCATIONS** | | | | |
| **Location 1:** | | | | |
| **Location 2:** | | | | |
| **Location 3:** | | | | |
| **Location 4:** | | | | |

**NOTE: All locations should be identified on accompanying drawings.**

## APPLICATION ATTACHMENTS

**Attachment A – Non Tech Summary**

Figure B.1 Site Location Map
Figure B.2 Site Plans
Drawing 2 Process Technology Drawing
Figure D.1 Anaerobic Digestion Layout
Figure F.1 Proposed Monitoring Locations

**Attachment B – General Information**

Attachment B.1 – Company Information

- Certificate of Incorporation

Attachment B.2 – Location of Activity

- Figure B.1 Site Location
- Figure B.2 Land Ownership; Application Site Boundary & Site Notice Location

Attachment B.3 – Planning Authority

- Copy of Notice of the Application to the Local Planning Authority (
- Copy of Planning Permission (ref 08/656)
- Waste Facility Permit (Ref No. WFP-RN-09-0001-01)

Attachment B.6 – Notices & Advertisements

- Copy of the Site Notice (Figure B.2 indicates the location of the site notice)
- Newspaper Notice

**Attachment C -Management of the Installation**

**Attachment D – Infrastructure and Operation**

Attachment D.2.a

- Drawing 2 (Process Technology)
- Figure D.1 Anaerobic Digestion Layout

**Attachment E – Emissions**

**Attachment F – Monitoring & Control**

Attachment F.2

- Figure F.1 Proposed Monitoring Locations

**Attachment G - Resource Use and Energy Efficiency**

**Attachment H – Materials Handling**

**Attachment I – Existing Environment & Impact of the Facility**

**Attachment J – Accident Prevention and Emergency Response**

**Attachment K – Remediation, Decommissioning, Restoration & Aftercare**

**Attachment L – Statutory Requirements**

Attachment L.2

- BioPowers Audited Accounts

## ATTACHMENT A - NON TECHNICAL SUMMARY

This Non-Technical Summary has been prepared in accordance with Article 12(1)(u) of the Waste Management (Licensing) Regulations S.I. 395 of 2004. Sub-articles (a) to (t) of Article 12 are addressed below.

For clarity, the paragraph numbering is in accordance with the numbering of Article 12(1), (a) to (t).

**Article 12(1)**

**(a) Applicant Details**

AD Power Roscommon Ltd
Ballinphuill,
Tibohine,
Castlerea,
Co Roscommon

Tel: 028 27837

Registered Company No: 470612

**Name & Address for Correspondence**

Tony Dineen
BioPower Ltd
48 Main Street
Schull
Co Cork



**(b) Planning Authority**

The development is proposed for a site in the functional area of Roscommon County Council:

Roscommon County Council
The Courthouse Roscommon
Co Roscommon

**(c) Sanitary Authority**

Not Applicable

**(d) Location**

The proposed facility will be located in the townlands of Ballinphuill, Tibohine, Castlerea, Co Roscommon (See Figure B.1). The National Grid reference for the site is:

E 1666 N 2935

**(e) Nature of the Development**

ADPower Roscommon Ltd. propose to construct an anaerobic digestion plant capable of receiving up to 24,999 tonnes of biodegradable waste per annum, at Ballinphuill, Tibohine, Castlerea, Co Roscommon The facility will incorporate the use of the Best Available Techniques (BAT). Incoming waste will comprise source separated organic waste from households and commercial premises and non hazardous industrial sludges and sewage sludges.

The site is located in an agricultural area, located off the main N5 Westport – Longford Road. Access to the site is via a county road which junctions the N5. The proposed site is a 6 acre site situated within a block of 30 acres of up to 10 year old forestry. The plantation is primarily coniferous, with deciduous trees circling. A cul-de-sac country road is present to the west of the proposed site, with a spur of this country road also present along the northern boundary of the site. The National N5 Road bounds the southern perimeter of the land under the applicants ownership. Agricultural grass land is located to the east of the site. Ballaghadereen is the nearest town and is located some 5km to the north west of the site.

There is a critical need to provide infrastructure for the treatment of biodegradable waste diverted from landfill in accordance with EU and national requirements. The proposal by ADPower Roscommon Ltd. will provide much needed infrastructure to treat biodegradable waste.



***Hours of Operation***

a) Proposed hours of operation

Staff will be on site from 7.45am to 5.45pm Mon-Sat.

The anaerobic digestion process will operate continuously. However, waste acceptance will be conducted only during the hours of operation specified in (b).

b) Proposed hours of waste acceptance/handling

Waste acceptance 08:00 to 17:00 Mon-Sat including bank holidays. No deliveries on Sundays.

**(f) Class of Activity**

In accordance with the Third and Fourth Schedules of the Waste management Acts, 1996 to 2008, it is proposed to carry out the following classes of activity at the facility:

**Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2008**

| | |
|---|---|
| Class 2. | Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).<br><br>This is the Principal Activity |
| Class 9. | Use of any waste principally as a fuel or other means to generate energy. |
| Class 13. | Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced |

## (g) Quantity of Nature of Waste (EWC Code)

It is proposed to accept up to 24,999 tonnes per annum at the anaerobic digestion plant. The proposed quantities are given below in tonnes per annum.

| Waste Type | Max Tonnes Per Annum |
|---|---|
| Household, Commercial & Industrial Source Separated Waste | 20,000 |
| Non-Hazardous Industrial Sludges | 2,500 |
| Sewage Sludge | 2,499 |
| **Total** | **24,999** |

The tonnages given per waste type are estimates and will depend on market conditions and it is requested that flexibility be given to the make up of the overall tonnage of 24,999 tonnes in Conditions of the Waste Licence e.g. there may be greater quantities of sludge available than source separated biowaste.

The following waste types by EWC Code will be accepted at the facility.

| Waste material | EWC Code | Main Source |
|---|---|---|
| Plant-tissue waste | 02 01 03 | Wastes from agriculture, horticulture & forestry |
| Sludges from washing and cleaning | 02 02 01 | Wastes from the preparation and processing of meat, fish and other foods of animal origin |
| Animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site | 02 01 06 | Wastes from the preparation and processing of meat, fish and other foods of animal origin |
| Materials unsuitable for consumption or processing | 02 02 03 | Wastes from the preparation and processing of meat, fish and other foods of animal origin |
| Sludges from on-site effluent treatment | 02 02 04 | Wastes from the preparation and processing of meat, fish and other foods of animal origin |
| Waste not otherwise specified | 02 02 99 | Wastes from the preparation and processing of meat, fish and other foods of animal origin |
| Sludges from washing, cleaning, peeling, centrifuging and separation | 02 03 01 | Wastes from fruit, vegetable & cereal … |
| Materials unsuitable for consumption or processing | 02 03 04 | Wastes from fruit, vegetable & cereal … |
| Sludges from on-site effluent treatment | 02 03 05 | Wastes from fruit, vegetable & cereal … |
| Wastes not otherwise specified | 02 03 99 | Wastes from fruit, vegetable & cereal … |
| Materials unsuitable for consumption or processing | 02 05 01 | Wastes from the dairy products industry |
| Sludges from on-site effluent treatment | 02 05 02 | Wastes from the dairy products industry |
| Wastes not otherwise specified | 02 05 99 | Wastes from the dairy products industry |
| Materials unsuitable for consumption or processing | 02 06 01 | Wastes from the baking and confectionery industry |
| Sludges from on-site effluent treatment | 02 06 03 | Wastes from the baking and confectionery industry |
| Waste not otherwise specified | 02 06 99 | Wastes from the baking and confectionery industry |
| Wastes from spirits distillation | 02 07 02 | Wastes from the production of alcoholic and non-alcoholic beverages |
| Materials unsuitable for consumption or processing | 02 07 04 | Wastes from the production of alcoholic and non-alcoholic beverages |
| Sludges from on-site effluent | 02 07 05 | Wastes from the production of alcoholic and non- |

| | | |
|---|---|---|
| treatment | | alcoholic beverages |
| Waste not otherwise specified | 02 07 99 | Wastes from the production of alcoholic and non-alcoholic beverages |
| Sludges from the physico/chemical treatment other than those mentioned in 19 02 05 | 19 02 06 | wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) |
| Sludges from the treatment of industrial waste water | 19 08 04 | wastes from waste water treatment plants not otherwise specified |
| sludges from treatment of urban waste water | 19 08 05 | wastes from waste water treatment plants not otherwise specified |
| Sludges from other treatment of industrial waste water other than those mentioned in 19 08 13 | 19 08 14 | wastes from waste water treatment plants not otherwise specified |
| Biodegradable kitchen and canteen waste | 20 01 08 | Municipal wastes including separately collected fractions |
| Edible oil and fat | 20 01 25 | Municipal wastes including separately collected fractions |
| Biodegradable waste | 20 02 01 | Garden and park wastes |
| Septic tank sludges | 20 03 04 | other municipal wastes |

**(h) Raw Materials**

The purpose of the facility is to convert biodegradable waste into energy through anaerobic digestion. The main raw material for the process is the biodegradable waste. To meet Animal By-Products Regulations requirements certain disinfectants will be required at the site. The chemicals used will be selected from the Department of Agriculture and Food approved list for facilities falling under the Animal By-Products Regulations. Diesel, lubricating oil and hydraulic oil will be used in the waste processing equipment. An onsite well will be used to provide water for the facility. The exact quantities to be used are unknown but will be continuously monitored from commencement of operation to improve efficiencies.



The anaerobic digestion will generate energy (electricity and heat). It is expected that 0.5MWe will be generated and the exact quantity will depend on the waste types being processed. Energy (electricity and heat) generated from the process will be used in the process. An energy audit will be conducted annually to ensure energy is being used efficiently.

**(i) Plant, Processes and Operating Procedures**

All treatment processes will be carried out within dedicated buildings. The following are a list of the unit operations involved in the anaerobic digestion process with a brief description of each.

The process should be looked at in conjunction with the aattached process layout Drawing 2 (Process Technology) and Figure D.1 Anaerobic Digestion Layout.

A. Waste Delivery

Incoming loads of waste will be directed by plant personnel to the Reception building. The incoming lorry will proceed into the reception area after which the roller shutter door will close.

Suitable liquid sludge's (1%-15%DS (Dry Solids)) will be pumped to the low solids reception tank. Incoming wastes with a Dry Solids content of greater than 15% will be passed through a shredder and then transferred to the Anaerobic Digester feed tank.

This feed tank will also be fed by the low solids reception tank to ensure a waste mix of suitable DS% content. There will also be a dedicated glycerol feed tank (30m3) to feed the Anaerobic Digester feed tank.

B. Odour Control

The proposed facility includes a bio filter to treat the displaced air from the reception building and reception tanks. This bio filter is equipped with a radial fan and a water scrubber to treat (adjust temperature and humidity) the displaced air in front of the bio filter in order to attain the minimum requirements for airborne emissions. There is a proposed air exchange rate of 3 times per hour for the reception building.

C. Anaerobic Digester Feed tank

The Anaerobic Digester feed tank will be a 500m3 covered tank. This tank will be linked to the odour control system for odour control management. This feed tank will be preheated.

D. Pasteurisation

The macerated waste will be pumped to the pre-pasteurisation process. The pasteurisation conditions are:

- Minimum temperature of 70degC
- Retention time of a minimum of 1 hour
- Particle size ≤12mm

The pasteurization stage operates as a batch pasteurization tank system. Temperature records of each batch will be recorded and archived. A heat recovery system will be used to recycle the heat from the pasteurisation stage to the Anaerobic Digestion feed tank. There will be an E-coli sampling station at this stage.



E. Digestion

The described digestion system will be designed for an organic waste throughput of 30,000 t/a. There are two 2000m3 digestion tanks. The minimum retention time for the proposed design is 23-25 days. The two digester tanks will be mixed to maintain a solution with a consistent Dry Matter content. Heating coils are present within the digester tanks to maintain the required temperature of average 38degC. Storage for the produced Biogas is provided by the two digester tanks which are equipped with a double membrane roof. The operational pressure is in the range of approximately 8 mbar. A variety of safeguards are incorporated in the specification to guarantee the highest level of security in the biogas system, these include but are not limited to:

- over/ under pressure security valves protecting the digester
- A hydraulic overflow protection system.
- Flame stoppers in the gas pipes
- Different biogas pressure and level control instruments together with the security programmes in the PLC.
- An over pressure security valve protecting the biogas storage tank.
- Flare to burn the biogas in the case of an outage of gas motors.

F. Solid Separation

Post digestion the digestate can be spread as a fertiliser direct to land. A solids separation building has been included in the event that at some stage in the future it is decided to separate the solids and liquid fraction. In this event the digestate will be passed through two decanters within the Solid Separation building. This will separate the digestate into a solid and liquid fraction. The liquid fraction will be stored in the

digestate storage tanks. The solid fraction will be stored in skips within the Solid Separation building. Currently it is not intended to separate the solids and liquids.

G. Digestate Storage

Digestate will be stored in the two digestate storage tanks (3,500m3, radius 13m). These tanks will provide storage of 150 days in order to conform to the Nitrates directive. This digestate will be used as an organic fertiliser. There will be a Salmonella sampling station at this stage.

H. Gas Scrubbing

All produced biogas will be passed through a gas scrubbing unit in order to remove trace impurities (i.e Hydrogen Sulphide) in the Biogas. This gas scrubbing unit will have a capacity of 360m3. This gas scrubber is designed to reduce H2S concentration from potentially high levels of 3,000mg/l to <500mg/l as required by the CHP system.

I. Combined Heat and Power Generator

The CHP boiler room will contain a 0.5MWe Combined Heat and Power generator. The electrical power produced by the Combined Heat and Power plant will be used to provide the complete electrical power demand for the Anaerobic Digestion plant. The boiler room will also house a 150kWt dual fuel oil-biogas boiler; this will serve as a back-up in the case of maintenance on the CHP unit. Heat produced by the CHP generator will be used to pre- heat the inputs in the Anaerobic digester feed tank, maintain the Anaerobic Digester tanks temperature of average 38degC.

J. Gas Flare

The gas flare is a safety measure in which in the event of an over pressure in the system the excess biogas will be flared.

K. Digestate Recirculation

Part of the digestate will be re-circulated back into the reception tank. Liquid digestate can be re-circulated to the reception tank to ensure that the incoming sludge's are of the correct consistency to allow easy handling. Recirculation pipes will be controlled by one-way valves.



**(j) Regarding Paragraphs (a) to (g) of section 40 (4) of the Waste Management Act**

The information contained within the waste licence application form and its attachments including the enclosed Environmental Impact Statement demonstrates that the proposed facility meets the above requirements of the Act.

**(K) Emissions from the Site**

*Air*

All waste acceptance and processing activities will take place within dedicated buildings.

The proposed waste reception hall will operate under negative pressure which will prevent emissions to the atmosphere via the entrances and exits to the building. Process air will be passed through a biofilter unit to control dust and odour emissions. Energy will be generated from the anaerobic digestion process through combined heat and power plant. Emissions from this energy utilisation plant will be monitored and controlled.

A wheelwash system will operate at the proposed facility to prevent vehicles exiting the site depositing dust and mud on the surrounding roads. Dust control measures will be implemented to ensure dust does not give rise to nuisance

*Noise*
Noise generated from every day operation of the BioPark will be minimal, all buildings will be insulated and all operations will take place indoors. All pumps will be enclosed in their own acoustic enclosure.

*Surface Water*
There will be no emissions to surface water.

*Groundwater*
There will be no direct emissions to groundwater from the proposed facility

**(l) Effects of Emissions**
An assessment of the effects of the above listed emissions on the environment has been carried out and it has been concluded that the proposed technology and management practices at the facility will ensure the effects of emissions on the environment will not be significant. Further details on emissions can found in Section 4 of the EIS and attachment E of the Waste Licence Application. The facility has been designed to minimise the emission of pollutants and operational procedures will be implemented to reinforce these design features.



**(m) Monitoring and Sampling Points**
A complete and comprehensive regime of regular environmental monitoring will be implemented at the site by the Applicant. At a minimum the Applicant proposes the establishment of the monitoring locations shown on Figure F.1 Proposed Monitoring Locations. These include air, surface water and noise monitoring locations. Further details on monitoring are provided in Attachment F of the Waste Licence Application. All environmental monitoring will be carried out by qualified persons and any laboratory analysis that is required will be carried out at an approved laboratory.

All monitoring will be carried out according to established procedures, approved by the Agency.

Annual reports containing details of environmental monitoring will be prepared and presented to the Agency.

**(n) Arrangements for Waste Arising from Activity**
No waste arisings are expected from the process

**(o) Arrangements for Off-Site Treatment or Disposal of Wastes**
No waste arisings are expected from the process

**(p) Unauthorised or Unexpected Emissions**
Staff will be present on site at all times during opening hours to supervise and carry out operations and to deal with any emergencies. Key staff will be on-call to respond to any emergency situation outside of normal working hours e.g. night-time and Sundays

An Emergency Procedure will be developed prior to facility operation and will deal with unexpected emissions such as odour/dust emissions to air, noise or emission to water and other eventualities e.g. fire or plant breakdown. The above-unexpected emissions/eventualities are not anticipated, however if they do arise they will be dealt with as per the procedure.

The Emergency procedure will include details of persons to contact, emergency services numbers and actions to be taken.

**(q) Closure and Restoration**

It is anticipated that the plant will be operated indefinitely. However if the facility should close for some unforeseen reason all waste and all equipment will be removed from the facility. Waste would be removed to authorised facilities. Equipment would be recycled where possible. The building where waste activities are proposed would remain and would likely be used again.

An Environmental Liabilities Risk Assessment will be prepared for the facility and will be submitted to the Agency once the facility is operational.

**(r)** – relates to landfilling of waste and is not relevant to this development.

**(s) European communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulation 2000**

The above Regulations do not apply to the proposed activity.

**(t) Geological and Hydrogeological Nature of the Land**

There will be no direct discharge to groundwater, as all proposed waste activities will take place on hard standing surfaces and indoors. Storm water from buildings and hardstand areas of the development will be collected and discharged to ground via a soak-away.

Treated effluent from the onsite waste water treatment system which serves the office and canteen will be treated in the anaerobic digester.

**Figure B.1 Site Location**

**Figure D.1 Anaerobic Digestion Layout**

**Drawing 2 (Process Technology)**

**Figure F.1 Proposed Monitoring Locations**

Surveyed 2006
Revised 2006
Levelled

# 1:50,000 Discovery Map

160807 302514 172307 302514

**ITM CENTRE PT. COORDS.**

566515,793303

**DESCRIPTION**

**MAP SHEETS**

1:50KRaster
OS1628 OS1630

SiteBoundry



Produced by National Map Services,
Unit 7, South Ring Business Park,
Kinsale Road,
Co. Cork
On behalf of Ordnance Survey Ireland, Phoenix Park, Dublin 8.



284064 160807 284064 172307

Scale:- 1:50,000
Scála:- 1:50,000

0 800 1,600 2,400 3,200 4,000 Metres
0 2,500 5,000 7,500 10,000 12,500 Feet

Plot Ref. No. 1340042_1_1
Plot Date 25-NOV-2008

N

Surveyed 1837-1838
Revised 1911-1914
Levelled 1915

# Record PLACE Map

165342 295237 — 167771 295237

Site Location Map 1:10,560
Ballinaphuill, Tibohine,
Castlerea, Co Roscommon
Figure B.2

**ITM CENTRE PT. COORDS.**

566515,793303

**DESCRIPTION**

**MAP SHEETS**

6 inch
SO046 RN014
RN008 MO074+08

Figure B.2

- Site Notice Location
- Land owned by BioPower
- Anaerobic Digestion Plant Boundary


Drawings prepared by:
Tony Dineen BEng MIEI

BioPower ltd
48 Main Street,
Schull,
Co Cork




291340 165342 — 291340 167771

Scale:- 1:10,560
Scála:- 1:10,560

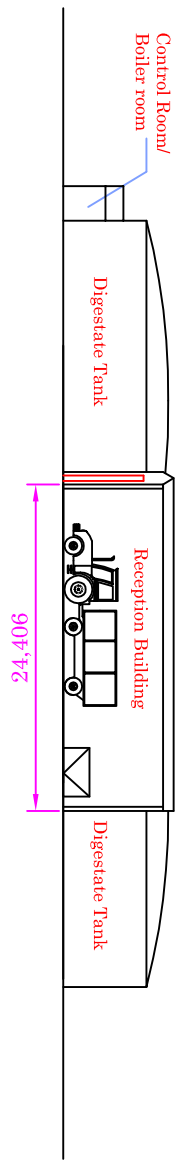
0 100 200 400 600 800 1,000 Metres
0 300 600 1,200 1,800 2,400 3,000 Feet

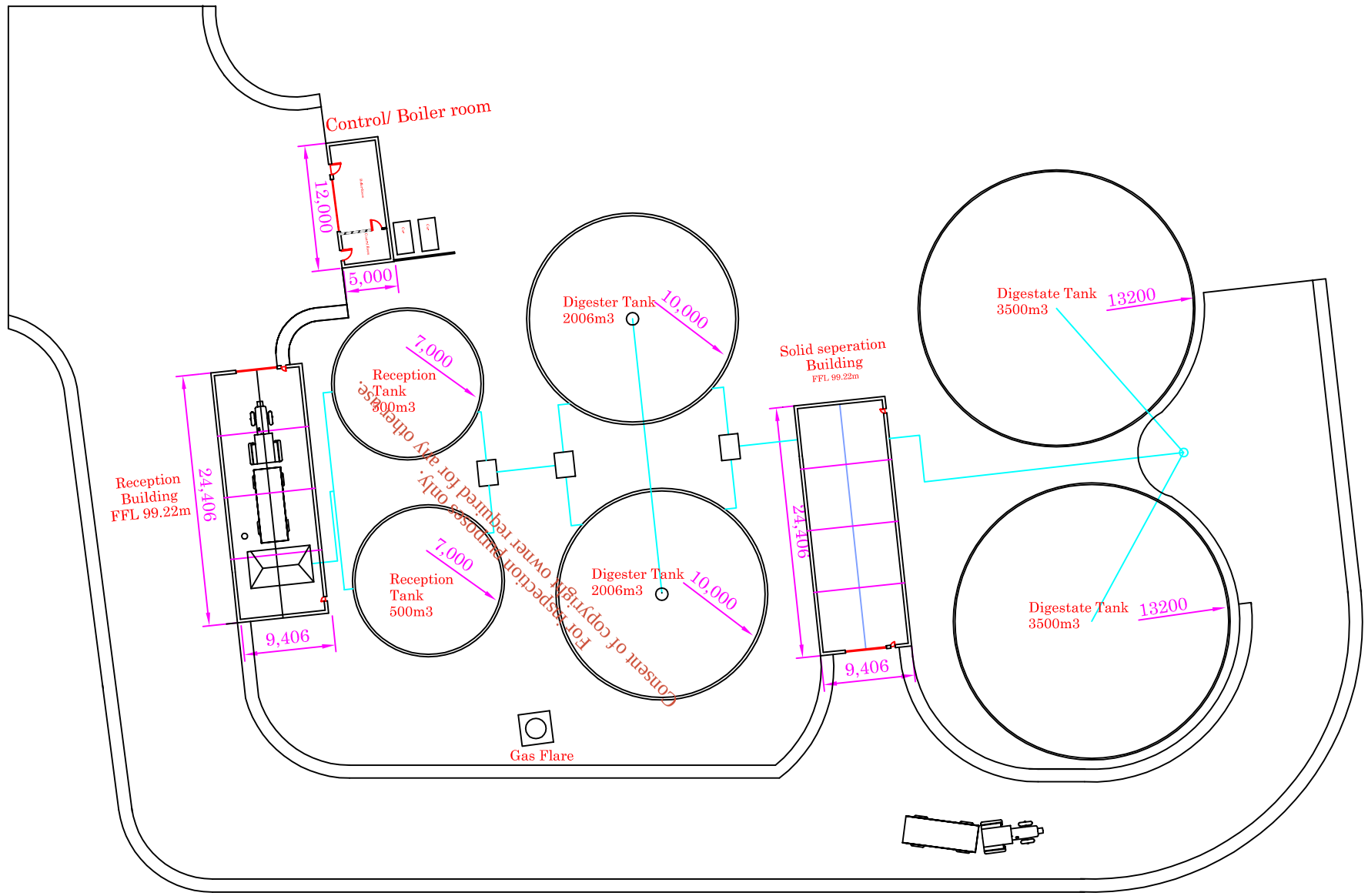
Plot Ref. No. 1282303_1
Plot Date 31-JAN-2008

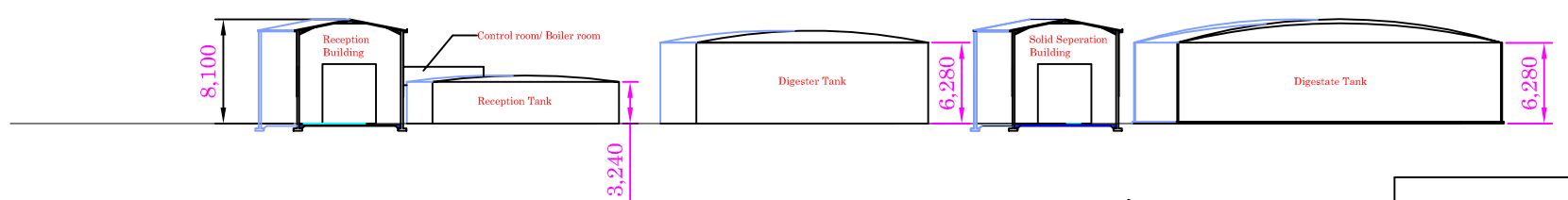
N

# Anaerobic Digestion Layout

## Figure D.1

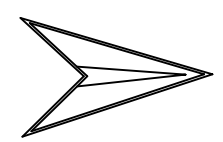



NOTES:
ALL BUILDING, CONSTRUCTION MATERIALS AND SPECIFICATIONS TO COMPLY WITH THE CURRENT BUILDING REGULATIONS AND THE DEPARTMENT OF THE ENVIRONMENT RECOMMENDATIONS. FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALE. CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE BEFORE STARTING WORK. ARCHITECT TO BE INFORMED OF ANY DISCREPENCIES BEFORE WORK PROCEEDS. LARGE SCALED DRAWINGS TAKE PREFERENCE OVER SMALLER DRAWINGS.

NOTES: All dimensions in mm



North

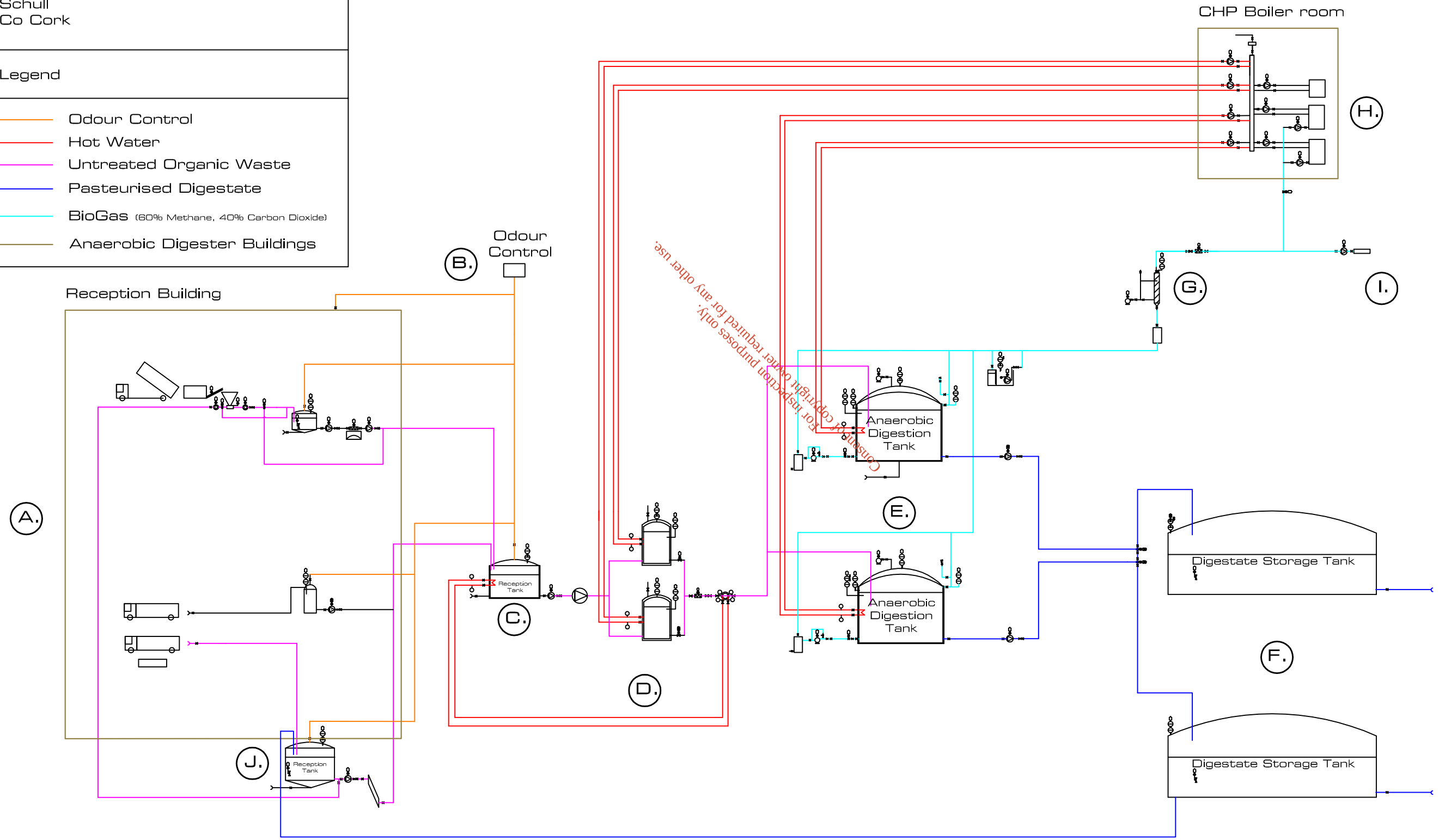
| Anaerobic Digestion layout | | |
|---|---|---|
| Drawings prepared by: Tim Clarke BSc MSc<br>Waste Works<br>Ventry,<br>Tralee,<br>Co.Kerry | | |
| Scale: NTS | Date: 11/12/09 | Drg No: Figure D1 |

Drawing 2 (Process Technology)

Drawings prepared by:
Tony Dineen BEng Struct. MIEI.
BioPower Ltd
48 Main Street
Schull
Co Cork

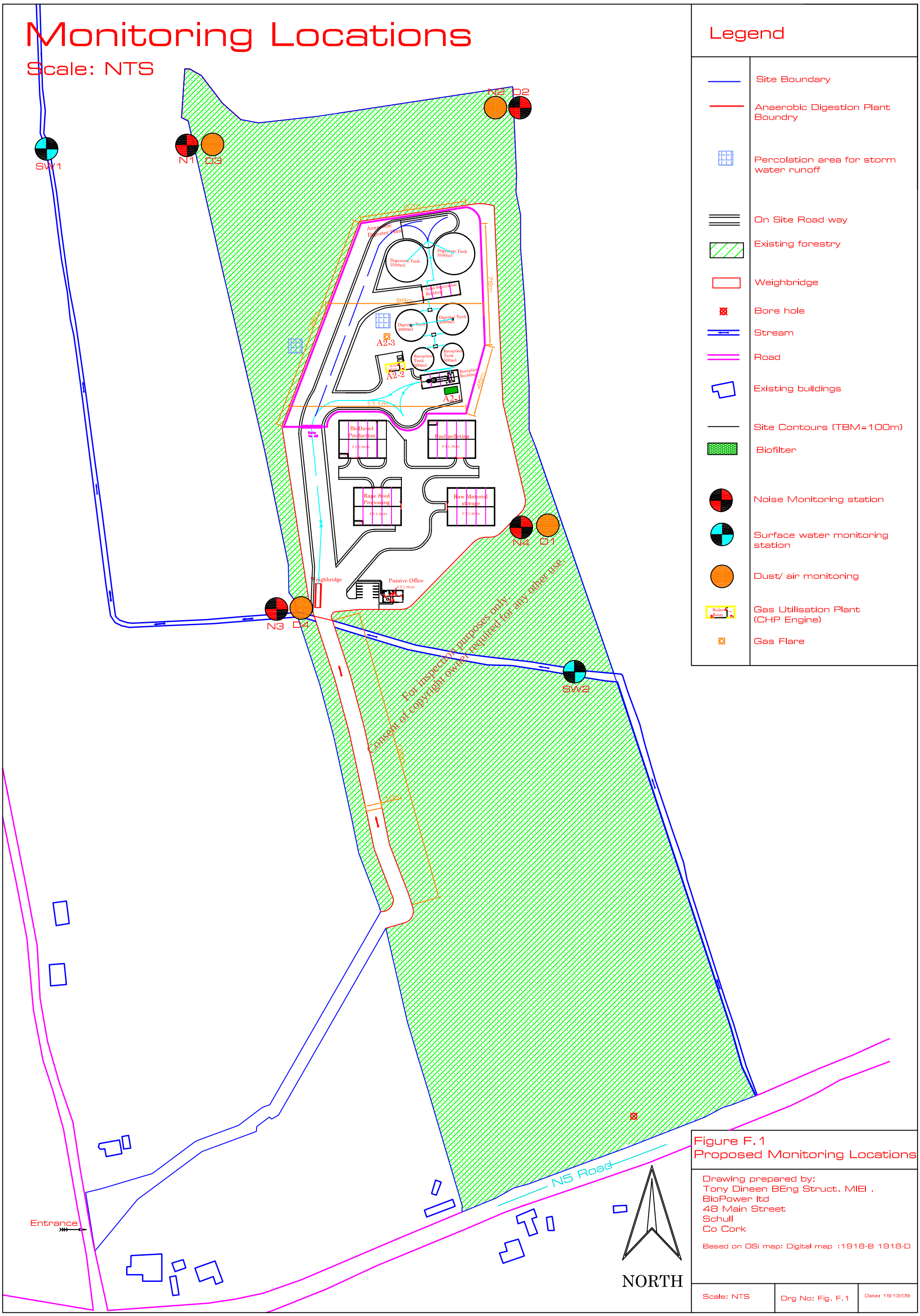
Legend

- Odour Control
- Hot Water
- Untreated Organic Waste
- Pasteurised Digestate
- BioGas (60% Methane, 40% Carbon Dioxide)
- Anaerobic Digester Buildings



# Monitoring Locations

Scale: NTS




## Legend

- Site Boundary
- Anaerobic Digestion Plant Boundry
- Percolation area for storm water runoff
- On Site Road way
- Existing forestry
- Weighbridge
- Bore hole
- Stream
- Road
- Existing buildings
- Site Contours (TBM=100m)
- Biofilter
- Noise Monitoring station
- Surface water monitoring station
- Dust/ air monitoring
- Gas Utilisation Plant (CHP Engine)
- Gas Flare

Figure F.1
Proposed Monitoring Locations


Drawing prepared by:
Tony Dineen BEng Struct. MIEI .
BioPower ltd
48 Main Street
Schull
Co Cork


Based on OSi map: Digital map :1918-B 1918-D

Scale: NTS | Drg No: Fig. F.1 | Date: 19/12/09

## ATTACHMENT B

**Attachment B.1**

| | |
|---|---|
| **Company Name:** | ADPower Roscommon Ltd |
| **a) Certificate of incorporation:** | See Attachment B.1 |
| **b) Company Registered Number:** | 470612 |
| **c) Company Directors:** | Walter Ryan-Purcell<br>Donall O Laoire<br>Willium Daunt |
| **d) Land interest details** | See Drawing B.2 attached |

ADPower Roscommon Ltd is a special purpose company established in 2009 to develop the facility at Roscommon. ADPower Roscommon Ltd (Applicant- site bounded by red line) is a 100% subsidiary of BioPower Ltd.

BioPower was formed just over 2 years ago and has been in a project development phase of operations. BioPower is now moving towards the commercial phase of operations and intends to be the leading force in the crucial Waste to Energy sector. Over the course of the next 5 years BioPower intends to roll out 30 BioParks® which will include anaerobic digestion treatment, across the UK & Ireland with the capability of handling in excess of 800,000 tons of 'environmentally & politically challenging' waste streams (Sewage Sludge, Industrial Sludge, Organic/Food Waste).



BioPower will convert these streams into Energy Rich Solutions:

- BioGas;
- Electricity & Heat; and
- high value Fertilisers.

**Attachment B.2 Location of Activity**

- Figure B.1 illustrates the location of site
- Figure B.2 shows the boundary to which the application relates as well as the location of the site notice.

**Attachment B.3 Planning Authority**

A copy of the notice of the application to the Planning Authority (Roscommon County Council) in accordance with Article 9 of the Waste Management (Licensing) Regulations is attached in B.3

The planning authority is Roscommon County Council. Planning permission for a BioPark which incorporates rape seed processing, biodiesel production, fuel pellet production and anaerobic digestion has been obtained. The Environmental Impact Statement (EIS) submitted as part of the planning application is attached with this application. A copy of the planning permission (ref 08/656) is included in Attachment B.3.

The planning application and EIS for the BioPark, referred to above, was for acceptance of 40,000 tonnes per annum of raw materials. This waste licence application is for acceptance of up to 24,999 tonnes of organic waste to the anaerobic digestion plant.

The facility has a waste facility permit from Roscommon County Council Ref No. WFP-RN-09-0001-01 and this is included in Attachment B.3.

**Attachment B.4 Sanitary Authority**
Not applicable.

**Attachment B.6 Notices and Advertisements**
*Site Notice:* Attachment B.6 contains a copy of the Site Notice. Figure B.2 indicates the location of the site notice.
*Newspaper Notice:* The original application includes the complete newspaper in which the advertisement was placed. The relevant page of the newspaper containing the advertisement is included with the 3 copies of the application in Attachment B.6.

**Attachment B.7 Type of Activity**
In accordance with the Third and Fourth Schedules of the Waste Management Acts, 1996 to 2008, it is proposed to carry out the following classes of activity at the facility:

**Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2008**

| | |
|---|---|
| **Class 2.**<br>**This is the Principal Activity** | **Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes):**<br>This activity relates to the recycling of organic substances by biological treatment (anaerobic digestion) of waste at the facility. |
| **Class 9.** | **Use of any waste principally as a fuel or other means to generate energy:**<br>It is proposed that the biogas generated from an anaerobic digester will be used to generate energy |
| **Class 13.** | **Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced:**<br>This activity relates to the storage of waste prior to further recovery off-site. |

**Attachment B.1**

- Certificate of Incorporation

*Duplicate Certificate*

DUPLICATE CERTIFICATE FEE PAID

# *Short Certificate of Incorporation of a Company*

## *I hereby certify,*

that company number **355995**,

**BIOPOWER LIMITED**

was Incorporated under the Companies Acts, 1963 to 2001,

as a Limited Company

On

**Monday, the 22nd day of April, 2002.**

Given under my hand at Dublin, this

**Friday, the 6th day of April, 2007.**

for Registrar of Companies

Companies Act, 1963, sec. 370(1)

**Number 437014**

# Certificate of Incorporation

I hereby certify that

**BIOPOWER GROUP PUBLIC LIMITED COMPANY**

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



Given under my hand at Dublin, this

**Wednesday, the 28th day of March, 2007**

for Registrar of Companies

**Number 470612**

# Certificate of Incorporation

I hereby certify that

**ADPOWER ROSCOMMON LIMITED**



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

Given under my hand at Dublin, this
**Friday, the 8th day of May, 2009**

for Registrar of Companies

**ATTACHMENT B.2**

- Figure B.1 Site Location
- Figure B.2 Land Ownership; Application Site Boundary & Site Notice Location

Surveyed 2006
Revised 2006
Levelled

# 1:50,000 Discovery Map

302514 160907 | 172307 302514

**ITM CENTRE PT COORDS**

566515,793303

**DESCRIPTION**

**MAP SHEETS**

1:50KRaster
OS1628 OS1630

**Figure B.1**

**Site Location Map**

**Site Location**

**Site Boundary**



Produced by National Map Services,
Unit 7, South Ring Business Park,
Kinsale Road,
Co. Cork
On behalf of Ordnance Survey
Ireland, Phoenix Park, Dublin 8.



284064 160907 | 172307 284064

Scale:- 1:50,000
Scála:- 1:50,000

0 800 1,600 2,400 3,200 4,000 Metres
0 2,500 5,000 7,500 10,000 12,500 Feet

Plot Ref. No. 1340042_1_1
Plot Date 25-NOV-2008

N

# Figure B.2
## Site Plan 1:2500
## Ballinaphuill, Tibohine, Castlerea, Co Roscommon

Surveyed 1994
Revised 2007
Levelled

**Rural PLACE Map**

166269 293750 — 166844 293750

**ITM CENTRE PT. COORDS.**
566515,793303

**DESCRIPTION**

**MAP SHEETS**
1:2500
1918-B 1918-D

**Figure B.2**
**Location of Facility to be Licensed**

Drawings prepared by:
Tony Dineen BEng. MIEI

BioPower ltd
48 Main Street,
Schull,
Co Cork

Boundary of land owned by BioPower 30 Acres

Boundary of land controlled by AD Power Roscommon Ltd enclosing the AD facility 3.8 Acres

Site Notice Location



Produced by National Map Services,
Unit 7, South Ring Business Park,
Kinsale Road,
Co. Cork
On behalf of Ordnance Survey Ireland, Phoenix Park, Dublin 8.

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292827 166269 — 292827 166844

Scale:- 1:2,500
Scála:- 1:2,500

0 40 80 120 160 200 Metres
0 150 300 450 600 750 Feet

Plot Ref. No. 1282303_1_5
Plot Date 31-JAN-2008

N

**ATTACHMENT B.3**

- Copy of Notice of the Application to the Planning Authority
- Copy of Planning Permission (ref 08/656)
- Waste Facility Permit (Ref No. WFP-RN-09-0001-01)

BioPower
Limited

Mr. John Cunningham,
Director of Services Planning and Water Services
Roscommon County Council
The Courthouse
Roscommon
Co Roscommon

30 December 2009

**Re: Application to the Environmental Protection Agency for a Waste Licence**

Dear Mr. Cunningham

We wish to inform you that ADPower Roscommon Limited, Ballinphuill, Tibohine, Castlerea, Co Roscommon intends to apply to the Environmental Protection Agency for a Waste Licence for a waste management facility at Ballinphuill, Tibohine, Castlerea, Co Roscommon - National grid reference 1666E, 2935N. The facility will consist of plant for treatment by anaerobic digestion of up to 24,999 tonnes per annum of non-hazardous waste.

The Principal class of activity at the facility, as specified in the Fourth Schedule of the Waste Management Acts 1996 to 2008 is as follows:

***2. Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes)***

Other activities to be carried out at the facility are as follows:

Under the Fourth Schedule of the Waste Management Acts 1996 to 2008

***9. Use of any waste principally as a fuel or other means to generate energy***

***13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced***

An Environmental Impact Statement will be submitted to the Agency with the Waste Licence Application.

A copy of the Waste Licence Application, the Environmental Impact Statement, and such further information relating to the application as may be furnished to the Agency in the course of the Agency's consideration of the application, will as soon as practicable after receipt by the Agency, be available for inspection or purchase at the headquarters of the Agency.

Yours sincerely

Tony Dineen BEngCivil. BEngStruct. MIEI

# ROSCOMMON COUNTY COUNCIL

## LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS, 1963-2007

## NOTIFICATION OF *FINAL GRANT OF PERMISSION*

**Planning register Ref.** **PD/08/656**

**TO :**
**BioPower Ltd.**
**48 Main Street,**
**Schull,**
**Co. Cork.**

**Application Receipt Date:** 21/05/2008

**Application by or on behalf of :** BioPower Ltd. 48 Main Street, Schull, Co. Cork.

**For a PERMISSION to:**

For the development of a BioPark and its associated buildings.This BioPark will involve: The consruction of three (30mx24m (12m to apex)) buildings to house the process of Rape Seed Processing, BioDiesel production and Fuel Pelleting. The construction of one (30mx24m (12m to apex)) building for raw material storage. The construction of an Anaerobic Digester (20,000 t/a). The Anercbic Digerter is made up of: Two 25mx10m (8.1 to the apex) buildings for the reception buildings and Solid Seperation building. Two 13.2 radius digestate tanks (6.28m high). Two 10m radius digester tanks (6.28m high). Two 7m radius reception tanks (3.24m high). One control/boiler room (12mx5m (4.4m high)). An energy efficent site office will also be constructed. A weighbridge will be constructed. The process of Anerobic digestion will require a Waste License. An EIS has been submitted with this application. The development is at Ballinphuill, Tibohine, Castlerea, Co. Roscommon.

**Subject to the 23 conditions set out in the Schedule attached.**

**Note: It is important to read and understand fully the conditions attached to this permission as set out in the attached schedule. All the conditions must be strictly complied with, otherwise the work will be unauthorised.**

**SIGNED:** _____
**Administrative Officer**

**DATE:** **04/11/2008**

## SCHEDULE OF CONDITIONS IMPOSED BY THE PLANNING AUTHORITY

**P & D Ref. No:** **PD/08/656**
**Applicant:** **BioPower Ltd.,**
**Development:** **PERMISSION for the development of a BioPark and its associated buildings.This BioPark will involve: The consruction of three (30mx24m (12m to apex)) buildings to house the process of Rape Seed Processing, BioDiesel production and Fuel Pelleting. The construction of one (30mx24m (12m to apex)) building for raw material storage. The construction of an Anaerobic Digester (20,000 t/a). The Anerobic Digerter is made up of: Two 25mx10m (8.1 to the apex) buildings for the reception buildings and Solid Seperation building. Two 13.2 radius digestate tanks (6.28m high). Two 10m radius digester tanks (6.28m high). Two 7m radius reception tanks (3.24m high). One control/boiler room (12mx5m (4.4m high)). An energy efficent site office will also be constructed. A weighbridge will be constructed. The process of Anerobic digestion will require a Waste License. An EIS has been submitted with this application. The development is Ballinphuill, Tibohine, Castlerea, Co. Roscommon**

1. The development shall be carried out strictly in accordance with plans and documents submitted on 21st May 2008, and as amended by the details submitted on 11th July 2008 and 6th August 2008, except where conditions hereunder specify otherwise.

   **Reason: In the interests of proper planning and development.**

2. All surface water run-off from roofs, entrances and parking areas shall be collected and disposed of within the site to soakpits/drains/adjacent water courses. In particular, no such water run-off shall be allowed to flow onto the public road or adjoining properties without the permission of the adjoining landowner.

   **Reason: In the interests of public health and orderly development**

3. Prior to the commencement of development, the developer shall submit a construction and demolition waste management plan to the local authority. This plan shall, where relevant, include the information recommended in sections 3.2, 3.3 and 3.4 of the document entitled "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects" published by the Department of the Environment, Heritage and Local Government in September 2004"

   **Reason: In the interests of the reduction and best practice management of construction and demolition waste from the proposed development**

4. All clean rainwater from roofs and clean concrete yards shall be separately collected and disposed of to the existing waterway. All surface water run-offs from the proposed roads and car parks shall be diverted towards a by-pass interceptor. The interceptor shall be installed and maintained to manufacturer's recommendations. The interceptor shall comply with BS8301:1985. The interceptor shall be inspected at intervals and cleaning and maintenance of the interceptor shall be carried out as regularly as is necessary in the manner described by the manufacturer. The interceptor shall be of sufficient capacity to avoid pollution of surface and grand waters.

   **Reason: In the interests of public health and orderly development**

**SCHEDULE OF CONDITIONS IMPOSED BY THE PLANNING AUTHORITY**

**P & D Ref. No:** **PD/08/656**
**Applicant:** **BioPower Ltd.,**
**Development:** **PERMISSION for the development of a BioPark and its associated buildings.This BioPark will involve: The consruction of three (30mx24m (12m to apex)) buildings to house the process of Rape Seed Processing, BioDiesel production and Fuel Pelleting. The construction of one (30mx24m (12m to apex)) building for raw material storage. The construction of an Anaerobic Digester (20,000 t/a). The Anerobic Digerter is made up of: Two 25mx10m (8.1 to the apex) buildings for the reception buildings and Solid Seperation building. Two 13.2 radius digestate tanks (6.28m high). Two 10m radius digester tanks (6.28m high). Two 7m radius reception tanks (3.24m high). One control/boiler room (12mx5m (4.4m high)). An energy efficent site office will also be constructed. A weighbridge will be constructed. The process of Anerobic digestion will require a Waste License. An EIS has been submitted with this application. The development is Ballinphuill, Tibohine, Castlerea, Co. Roscommon**

5. All oil storage tanks located above ground shall be provided with an adequately designed bund system complete with an impervious base. Filling and take off points shall be located within the bund.

   **Reason: In the interests of orderly development**

6. All waste interceptor sludges are to be collected and disposed of by an authorised waste oil collector in accordance with the Waste Management Act 1996as amended.

   **Reason: In the interests of orderly development**

7. The developer shall ensure that all public roads shall be maintained free of litter originating from the proposed development.

   **Reason: In the interests of public health and orderly development**

8. Fire hydrants shall be located as per 'Recommendations for site development works for housing areas'. Hydrants shall be located so that all areas of the proposed development are measured no more than 46m from a hydrant along an unobstructed route.

   **Reason: In the interests of orderly development**

9. On completion of the development the developer shall provide the following:
   - Details of water and air tests carried out on sewers
   - Infiltration test for manholes
   - CCTV survey including location map and condition report
   - Record drawings of all underground services.

   **Reason: In the interests of orderly development**

10. No gateway or barrier shall be erected on the new access road leading from the local road, L55421, to the plant.

    **Reason: In the interest of traffic safety**

**SCHEDULE OF CONDITIONS IMPOSED BY THE PLANNING AUTHORITY**

**P & D Ref. No:** **PD/08/656**
**Applicant:** **BioPower Ltd.,**
**Development:** **PERMISSION for the development of a BioPark and its associated buildings.This BioPark will involve: The consruction of three (30mx24m (12m to apex)) buildings to house the process of Rape Seed Processing, BioDiesel production and Fuel Pelleting. The construction of one (30mx24m (12m to apex)) building for raw material storage. The construction of an Anaerobic Digester (20,000 t/a). The Anerobic Digerter is made up of: Two 25mx10m (8.1 to the apex) buildings for the reception buildings and Solid Seperation building. Two 13.2 radius digestate tanks (6.28m high). Two 10m radius digester tanks (6.28m high). Two 7m radius reception tanks (3.24m high). One control/boiler room (12mx5m (4.4m high)). An energy efficent site office will also be constructed. A weighbridge will be constructed. The process of Anerobic digestion will require a Waste License. An EIS has been submitted with this application. The development is Ballinphuill, Tibohine, Castlerea, Co. Roscommon**

11. The raw materials to be supplied to the development shall be as stated in the submission made to the planning authority on 6th August 2008.

    **Reason: In the interests of orderly development**

12. The developer shall maintain a register of all traffic and deliveries to the plant. The data shall include vehicle registration, classification and capacity. This data shall be made available to the Planning Authority at all reasonable times and within 48 hours in the case of any written demand. The data shall be provided to the Planning Authority in a format satisfactory to the Planning Authority prior to 31st January following each calendar year of operation.

    **Reason: In the interests of orderly development**

13. Within 12 months of the date of opening of the plant the developer shall prepare and submit a traffic management and control plan in relation to delivery and exiting traffic to and from the plant. This plan shall include consideration of practical methodologies for minimising the numbers of slower moving agricultural vehicles and optimising loads to larger tanker type deliveries. Incentive schemes to achieve this shall also be considered. The plan shall be submitted to the Planning Authority for acceptance and approval following the first twelve months of operation and thereafter on a 24 month cycle. The developer shall be bound by any amendments to the plan put forward by the Planning Authority.

    **Reason: In the interest of traffic safety and orderly development**

**SCHEDULE OF CONDITIONS IMPOSED BY THE PLANNING AUTHORITY**

**P & D Ref. No:** **PD/08/656**
**Applicant:** **BioPower Ltd.,**
**Development:** **PERMISSION for the development of a BioPark and its associated buildings.This BioPark will involve: The consruction of three (30mx24m (12m to apex)) buildings to house the process of Rape Seed Processing, BioDiesel production and Fuel Pelleting. The construction of one (30mx24m (12m to apex)) building for raw material storage. The construction of an Anaerobic Digester (20,000 t/a). The Anerobic Digerter is made up of: Two 25mx10m (8.1 to the apex) buildings for the reception buildings and Solid Seperation building. Two 13.2 radius digestate tanks (6.28m high). Two 10m radius digester tanks (6.28m high). Two 7m radius reception tanks (3.24m high). One control/boiler room (12mx5m (4.4m high)). An energy efficent site office will also be constructed. A weighbridge will be constructed. The process of Anerobic digestion will require a Waste License. An EIS has been submitted with this application. The development is Ballinphuill, Tibohine, Castlerea, Co. Roscommon**

14. Prior to commencement of development, the developer shall submit to the planning authority for written agreement a proposal for an Environmental Management System (EMS). This shall include the following:

    (a) Proposals for the suppression of on-site noise (in order to comply with conditions set out in this permission).

    (b) Proposals for the on going monitoring of sound emissions at dwellings to be agreed with the planning authority.

    (c) Proposals for the suppression of dust on site and on the access road.

    (d) Proposals for the bunding of fuel and lubrication storage areas and details of emergency action in the event of accidental spillage.

    (e) Details of safety measures for the development, to include warning signs and stock proof fencing (works to be carried out within one month of the written agreement of the planning authority to these details).

    (f) Management of all landscaping, with particular reference to enhancing the ecological value of the woodland/grassland on the bunds and buffer areas.

    (g) Monitoring of ground and surface water quality, levels and discharges.

    (h) Full details of site manager, contact numbers (including out of hours) and public information signs on the entrance to the facility, details which shall be agreed with the planning authority.

**Reason: In the interest of orderly development and to safeguard local amenities.**

**SCHEDULE OF CONDITIONS IMPOSED BY THE PLANNING AUTHORITY**

**P & D Ref. No:** **PD/08/656**
**Applicant:** **BioPower Ltd.,**
**Development:** **PERMISSION for the development of a BioPark and its associated buildings.This BioPark will involve: The consruction of three (30mx24m (12m to apex)) buildings to house the process of Rape Seed Processing, BioDiesel production and Fuel Pelleting. The construction of one (30mx24m (12m to apex)) building for raw material storage. The construction of an Anaerobic Digester (20,000 t/a). The Anerobic Digerter is made up of: Two 25mx10m (8.1 to the apex) buildings for the reception buildings and Solid Seperation building. Two 13.2 radius digestate tanks (6.28m high). Two 10m radius digester tanks (6.28m high). Two 7m radius reception tanks (3.24m high). One control/boiler room (12mx5m (4.4m high)). An energy efficent site office will also be constructed. A weighbridge will be constructed. The process of Anerobic digestion will require a Waste License. An EIS has been submitted with this application. The development is Ballinphuill, Tibohine, Castlerea, Co. Roscommon**

15. On an annual basis, for the lifetime of the facility (within two months of each year end), the developer shall submit to the planning authority five copies of an environmental audit. Independent environmental auditors approved by the planning authority shall carry out this audit. This audit shall be carried out at the expense of the developer and made available to the public for inspection at all reasonable hours at a location to be agreed with the planning authority. This report shall contain:

    (a) A written record derived from the on-site weighbridge of the quantity of material leaving the site. This quantity shall be specified in tonnes.
    (b) An annual topographical survey carried out by an independent qualified surveyor approved by the planning authority. This survey shall show all areas excavated and restored. On the basis of this a full materials balance shall be provided to the planning authority.
    (c) A record of all movements of heavy vehicles outside the times set out in condition number 14 above.
    (d) A record of groundwater levels measured at monthly intervals.
    (e) A full record of all breaches over the previous year for noise, dust, and water quality monitoring.
    (f) A written record of all complaints, including actions taken on each complaint.

    In addition to this annual audit, the developer shall submit quarterly reports with full monitoring records of dust monitoring, noise monitoring, surface water quality monitoring, and groundwater monitoring, details of such information to be agreed with the planning authority. Notwithstanding this requirement, all incidents where levels of noise or dust exceed agreed levels shall be notified to the planning authority within two working days. Incidents of surface or groundwater pollution or incidents that may result in groundwater pollution, shall be notified to the planning authority without delay.

    **Reason: In the interest of protecting residential amenities and ensuring a sustainable use of non-renewable resources.**

**SCHEDULE OF CONDITIONS IMPOSED BY THE PLANNING AUTHORITY**

**P & D Ref. No:** **PD/08/656**
**Applicant:** **BioPower Ltd.,**
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16. Operating hours for the Bio Diesel and Fuel Pelleting production shall be restricted to between 0800 hours and 1700 hours, Monday to Saturday. These facilities shall not operate outside these hours or on Sundays or public holidays.

    **Reason: In the interest of residential amenity.**

17. During the operation phase of the proposed development, the noise level from within the premises, measured at noise sensitive locations in the vicinity shall not exceed: (a) LAeqT value of 55 dB(A) during the period of 0800 to 1800 hours from Monday to Saturday (inclusive) and (b) an LAeqT value of 45 dB(A) at any other time.

    **Reason: To protect the amenities of properties in the vicinity of the site.**

18. Total dust emissions arising from the on-site operations shall not exceed 350 milligrams per metre squared per day averaged over a continuous period of 30 days when measured as deposition of insoluble and soluble particulate matter at any position along the boundary of the facility. An adequate hose capacity shall be maintained in the quarry area to dampen down stockpiles, waste piles, and equipment during periods of dry windy weather to prevent the emission of fugitive dust.

    **Reason: In the interest of protecting the amenities of the area.**

19. The wheels and undersides of all vehicles transporting aggregate from the site onto the public road shall, prior to the exit of such vehicles onto the public road, be washed in a wheel washing facility which shall be constructed, installed and operated in accordance with the requirements of the planning authority.

    **Reason: In the interest of the amenities of the area and of traffic safety and convenience.**

## SCHEDULE OF CONDITIONS IMPOSED BY THE PLANNING AUTHORITY

**P & D Ref. No:** **PD/08/656**
**Applicant:** **BioPower Ltd.,**
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**20.** Prior to the commencement of any development, the developer shall employ a qualified archaeologist (agreed with the National Monuments Service) to archaeologically test the area that will be disturbed by the development and to assess the impact of the development on archaeological material in the ground.

An archaeological impact statement shall be prepared and submitted to the Planning Authority and National Monuments Service prior to any construction works. The assessment shall consist of relevant documentary research and trial trench excavations and the report to be submitted shall address the degree to which the extent, location and levels of all foundations, service trenches and other sub-surface works effect existing archaeological remains, and the proposals for any remedial works required.

In the event of archaeological material being discovered, the developer shall immediately notify the National Monuments Service and the Planning Authority, and shall facilitate the recording and/or preserving of such items as so directed by the National Monuments Service.

**Reason: In the interests of preserving items of archaeological significance effected by the development.**

**21.** Prior to the commencement of the development, the developer shall pay the sum of **€105,787.00** updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office to Roscommon County Council as a contribution towards the expenditure that was incurred or is proposed by the Planning Authority in respect of providing public infrastructure and services.

**Reason: It is considered reasonable that the developer should contribute towards the expenditure that is proposed to be incurred by the Council in respect of the provision of public infrastructure and services.**

## SCHEDULE OF CONDITIONS IMPOSED BY THE PLANNING AUTHORITY

**P & D Ref. No:** **PD/08/656**
**Applicant:** **BioPower Ltd.,**
**Development:** **PERMISSION for the development of a BioPark and its associated buildings.This BioPark will involve: The consruction of three (30mx24m (12m to apex)) buildings to house the process of Rape Seed Processing, BioDiesel production and Fuel Pelleting. The construction of one (30mx24m (12m to apex)) building for raw material storage. The construction of an Anaerobic Digester (20,000 t/a). The Anerobic Digerter is made up of: Two 25mx10m (8.1 to the apex) buildings for the reception buildings and Solid Seperation building. Two 13.2 radius digestate tanks (6.28m high). Two 10m radius digester tanks (6.28m high). Two 7m radius reception tanks (3.24m high). One control/boiler room (12mx5m (4.4m high)). An energy efficent site office will also be constructed. A weighbridge will be constructed. The process of Anerobic digestion will require a Waste License. An EIS has been submitted with this application. The development is Ballinphuill, Tibohine, Castlerea, Co. Roscommon**

22. Prior to the commencement of the development, the developer shall pay the sum of **€291,000.00** updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office to Roscommon County Council as a special contribution in accordance with Section 48 2(c) of The Planning and Development Act 2000. These monies shall be utilised by the Planning Authority to carry out road works on the public roads and the National Primary Road, N5. The developer may with the agreement of the Planning Authority carry out such works to a standard and methodology acceptable to the planning authority. In the event of the developer opting to carry out such works all details must be agreed in advance including health and safety plan, specifications, material types and tolerances. All such works to be in accordance with DMRB (Design Manual for Roads and Bridges) Standards and Procedures.



**Reason: It is considered reasonable that the developer should contribute towards the expenditure that is proposed to be incurred by the Council in respect of works for the upgrading of the public roads and the National Primary Road, N5.**

**23.** The developer shall give the Planning Authority two weeks notice in writing of his intention to commence development on the site.

**Reason: In the interests of orderly development**

# COMHAIRLE CONTAE ROS COMÁIN
# Roscommon County Council

TEACH NA CÚIRTE
ROS COMÁIN
Teil: 090-6632500 Faics: 090-6637108

COURTHOUSE
ROSCOMMON
Tel: 090-6632500 Fax: 090-6637108

**Roscommon County Council**
Courthouse
Roscommon

Comhairle Chontae
Ros Comáin
Teach na Cúirte
Ros Comáin

Tel: (090) 6632500
Fax: (090) 6637108

*E-mail:*
secretar@roscommoncoco.ie

*Website:*
www.roscommoncoco.ie

***Direct Phone Nos:***

| | |
|---|---|
| Prefix: | 090 |
| Reception | 6632500 |
| Arts Centre | 6625824 |
| Arts Officer | 6637285 |
| Community & Enterprise | 6637325 |
| Civil Defence | 6637206 |
| Corporate Services | 6637140 |
| Environment | 6637260 |
| Finance | 6637187 |
| Fire Services | 6634823 |
| Housing | 6637230 |
| Human Resources | 6637144 |
| Information Technology | 6637200 |
| Library HQ | 6637270 |
| L-I-T-T-E-R | 1850 54 88 37 |
| Motor Tax | 6637250 |
| Planning | 6637175 |
| Regional Offices NRA | 6627004 |
| Rates | 6637210 |
| RCDB | 6637325 |
| Reg. of Electors | 6637147 |
| Roads | 6637152 |
| Stores | 6637225 |
| Water Services | 6637165 |

Tá fáilte romhat gnó a dhéanamh as Gaeilge


## ROSCOMMON COUNTY COUNCIL

**Waste Management (Facility Permit and Registration) Regulations, S.I. No. 821 of 2007**
**And**
**Waste Management (Facility Permit and Registration) (Amendment) Regulations 2008**

## Waste Facility Permit

**Further to an application received on 2nd March, 2009**

**Applicant:** **BioPower Ltd.,**

**Address:** **48 Main Street, Schull, County Cork.**

**Ref:** **WFP-RN-09-0001-01**

**Location of Facility:** **Ballinaphuill, Tibohine, Castlerea, Co. Roscommon.**



**Nature of Activity**
This permit is for the processing of a maximum annual intake of 10,000 tonnes of organic waste by the process of Anaerobic Digestion which will result in the production of methane gas (to be used to produce heat and electricity) and Biosolids (which shall be used as an organic fertiliser on land).

**Class of Activity concerned under Waste Management Act 1996 as amended**
The applicant has applied under Class 8 of the Third Schedule, Part II of the Waste Management (Facility Permit and Registration) Amendment Regulations, 2008:

| Class No: | Class Description: |
|---|---|
| Class 8 | The reception, storage and biological treatment of biowaste at a facility where –<br><br>the maximum amount of compost and biowaste held at the facility does not exceed 6000 cubic meters at any time, and<br><br>the annual intake shall not exceed 10,000 tonnes." |

# COMHAIRLE CONTAE ROS COMÁIN
# Roscommon County Council

TEACH NA CÚIRTE
ROS COMÁIN
Teil: 090-6632500 Faics: 090-6637108

COURTHOUSE
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**Roscommon County Council**
Courthouse
Roscommon

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Tel: (090) 6632500
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*E-mail:*
secretar@roscommoncoco.ie

*Website:*
www.roscommoncoco.ie

***Direct Phone Nos:***

| | |
|---|---|
| Prefix: | 090 |
| Reception | 6632500 |
| Arts Centre | 6625824 |
| Arts Officer | 6637285 |
| Community & Enterprise | 6637325 |
| Civil Defence | 6637206 |
| Corporate Services | 6637140 |
| Environment | 6637260 |
| Finance | 6637187 |
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| L-I-T-T-E-R | 1850 54 88 37 |
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| Planning | 6637175 |
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| Rates | 6637210 |
| RCDB | 6637325 |
| Reg. of Electors | 6637147 |
| Roads | 6637152 |
| Stores | 6637225 |
| Water Services | 6637165 |

Tá fáilte romhat gnó a dhéanamh as Gaeilge


and Class 2 of the Fourth Schedule of the Waste Management Act 1996 as amended:

| Class No: | Class Description: |
|---|---|
| Class 2 | Recycling or reclamation of organic substances which are not used as solvents *(including composting and other biological processes)*. |

This Waste Facility Permit is valid for a maximum period of **5** Years from the date of grant of the Certificate.

Roscommon County Council, in exercise of the power conferred on it by Waste Management (Facility Permit and Registration) Regulations, S.I. No. 821 of 2007 and Waste Management (Facility Permit and Registration) (Amendment) Regulations 2008 hereby grants a permit to BioPower Ltd., 48 Main Street, Schull, County Cork.



County Manager/Director of Services

30th April 2009
Date

**ATTACHMENT B.6**

- Copy of the Site Notice (Figure B.2 indicates the location of the site notice)
- Newspaper Notice (The original application includes the complete newspaper)

# APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTE LICENCE

ADPower Roscommon Limited, Ballinphuill, Tibohine, Castlerea, Co Roscommon intends to apply to the Environmental Protection Agency for a Waste Licence at Ballinphuill, Tibohine, Castlerea, Co Roscommon - National grid reference 1666E, 2935N. The facility will consist of plant for treatment by anaerobic digestion of up to 24,999 tonnes per annum of non-hazardous waste.

The Principal class of activity at the facility, as specified in the Fourth Schedule of the Waste Management Acts 1996 to 2008 is as follows:

***2.*** ***Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes)***

Other activities to be carried out at the facility are as follows:

Under the Fourth Schedule of the Waste Management Acts 1996 to 2008

***9.*** ***Use of any waste principally as a fuel or other means to generate energy***

***13.*** ***Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced***



An Environmental Impact Statement will be submitted to the Agency with the Waste Licence Application.

A copy of the Waste Licence Application, the Environmental Impact Statement, and such further information relating to the application as may be furnished to the Agency in the course of the Agency's consideration of the application, will as soon as practicable after receipt by the Agency, be available for inspection or purchase at the headquarters of the Agency.

**Date of Erection of Site Notice**: 30/12/2009

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## ATTACHMENT C – MANAGEMENT OF THE INSTALLATION

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

BioPower owns 100% of ADPower Roscommon Ltd and will provide the necessary technical support and put in place suitable management to operate the facility. Key members of BioPower include:

**Wayne Byrne *Chief Executive Officer BioPower***

Wayne joined BioPower from Manvik where he was Group Managing Director of Manvik Environmental Limited, the holding company for Manvik's business interests in the UK and Ireland. Manvik is a market leader in the supply of Refuse vehicles and waste equipment in the municipal sector. Wayne was one of the founders of the Group entity and recently was involved in successfully selling his interest in the business.

Prior to joining Manvik, Wayne headed up the Public Sector practice for SAP. He was responsible for SAP's business development by providing finance and HR solutions to large government and municipal authorities. Wayne holds an International Executive Masters in Business Administration from Smurfit College of Business, University College Dublin (UCD) and a Diploma in Advanced Management from UCD and is a fellow of the Chartered Institute of Waste Management

**Walter Ryan-Purcell**

Walter is the founder of BioPower. Walter was cofounder and Managing Director of McGill Environmental Systems (Ireland) Ltd., for over 10 years. McGill is still today one of Irelands most successful industrial composting business.

Walter has Bachelor of Agricultural Science at UCD and is a Graduate in Marketing with the Marketing Institute of Ireland. Walter has also completed Business Management, Development of Entrepreneurs in Boston for Ireland (DEBI Programme), Boston College, U.S.A. and Entrepreneurship Programme with Shannon Development.

**Tim Clarke**

Tim joined BioPower in 2008. Tim had previously run a successful consulting practice for over 10 years specialising in sustainable waste, water and biomass energy systems. This included process and system design for new AD projects, feasibility studies, and licensing. Clients include private, industrial and engineering companies, and government departments in UK and Ireland. Tim also has extensive experience of design, installation and operation of reedbed and wetland wastewater treatment systems, and compost plant.

Prior to that Tim spent 10 years in developing new systems and processes at leading UK digester company FarmGas Ltd in the 1980's, he was a founding director of a new company, Environmental Energy Ltd, designing and supplying subcontract digester systems of his design in various EU countries. He has designed a large number of digesters for treatment of wastes including municipal solid wastes, sewage sludge, industrial wastes and animal manures. Two of his research projects have been supported by the UK department of Trade and Industry. The first in 1986, a project demonstrating anaerobic digestion of meat-industry wastes; and a successful 2-year project 1995-6 DEMOS, demonstration of high-solids digestion of municipal solid wastes.

Tim has a Masters in Biology (M.Sc) from Auckland University, New Zealand, and B.Sc from St Andrews University, Scotland. He has over 25 years experience of development, design and implementation of anaerobic digestion processes and projects for treatment and energy

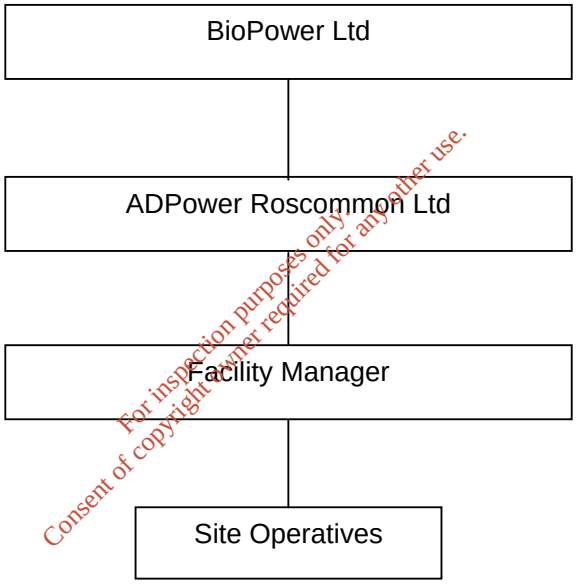
recovery from a wide variety of liquid and semi-solid wastes including livestock wastes, municipal, food and industrial wastes, and crops/crop wastes

**Proposed Facility Management Structure**
The proposed Facility Management Structures for the facility is set out in Figure C.1. The list of facility personnel and respective responsibilities is set out below. The staff will be qualified / trained for the relevant position.

*Facility Manager*: Responsible for the overall management of the facility, including license compliance, operations and maintenance of the facility, and personnel management.

*Site Operatives:* Responsible for weighing in and out vehicles; waste acceptance; operating machinery to process waste; maintaining the facility in a tidy state and other duties.

**Figure C.1 Facility Management Structure**






**Attachment C.2 Environmental Management System (EMS)**
An EMS to reflect proposed waste activities will be prepared and maintained in accordance with the conditions of the waste licence once granted and EPA guidelines. The EMS will be established prior to commencement of waste activities at the site and will be updated on an annual basis.

The EMS will include as a minimum the following elements, which relate directly to standard conditions of an EPA waste licence concerning EMS requirements (typically Condition 2 Management of Facility of an EPA waste licence):

**1 Management and Reporting Structure**
Details of the on-site management structure indicating in particular responsibility levels for environmental management will be provided.

**2 Schedule of Environmental Objectives and Targets**
A Schedule of Environmental Objectives and Targets will be prepared. This will as a minimum provide for a review of all operations and processes, including an

evaluation of practicable options, for energy and resource efficiency. The schedule will include time frames for the achievement of set targets and will address a five year period as a minimum. The schedule will be reviewed annually and amendments notified to the EPA for agreement as part of the Annual Environmental Report (AER).

**3 Environmental Management Programme (EMP)**

An EMP will be prepared and will include a time schedule for achieving the Environmental Objectives and Targets identified under bullet 2 above. The EMP will include:

- designation of responsibility for targets;
- the means by which they may be achieved;
- the time within which they may be achieved.

The EMP shall be reviewed annually. A report on the programme, including the success in meeting agreed targets, will be prepared and submitted to the EPA as part of the AER.

**4 Documentation**

An environmental management documentation system will be established and maintained. Copies of regulatory permits (waste licence and planning) will be made available to all relevant personnel whose duties relate to any conditions of the waste licence or planning permission.

**5 Corrective Action**

Procedures will be established to ensure that corrective action is taken should the specified requirements of the waste licence not be fulfilled. The responsibility and authority for initiating further investigation and corrective action in the event of a reported nonconformity with the waste licence will be defined.



**6 Awareness and Training**

Procedures will be established and maintained for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment. Appropriate records of training will be maintained.

**7 Communications Programme**

A Public Awareness and Communications Programme will be established and maintained to ensure that members of the public are informed, and can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility.

**8 Maintenance Programme**

A programme for maintenance of all plant and equipment (based on the instructions issued by the manufacturer/supplier or installer of the equipment) will be established and maintained. Appropriate record keeping and diagnostic testing shall support this maintenance programme.

**9 Efficient Process Control**

A programme to ensure there is adequate control of processes under all modes of operation will be established and maintained. The programme will identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these parameters. Abnormal process operating conditions will be documented, and analysed to identify any necessary corrective action.

ADPower Limited is committed to developing each of the above elements prior to commencement of waste activities at the site and improving them on an ongoing basis thereafter.

**Attachment C.3 Hours of Operation**

a) Proposed hours of operation

Staff will be on site from 7.45am to 5.45pm Mon-Sat.

The anaerobic digestion process will operate continuously. However, waste acceptance will be conducted only during the hours of operation specified in (b).

b) Proposed hours of waste acceptance/handling

| | |
|---|---|
| Waste acceptance | 08:00 to 17:00 Mon-Sat including bank holidays. No deliveries on Sundays. |

**Attachment C.4 Conditioning Plan**

Not Applicable.

## ATTACHMENT D – INFRASTRUCTURE & OPERATION

### Attachment D.1 Infrastructure

**a. Site Security Arrangements Including Gates and Fencing**

The following security arrangements are proposed for the Anaerobic Digestion Plant:

- The Anaerobic Digestion Plant facility will be secured by 1.8m high permanent animal proof boundary fencing and lockable gate.
- During normal operation hours, there will be at all times at least one competent employee on site.
- There will be a sign in/sign out procedure in place for all visitors to the site.

b. **Designs for Site Roads**

All access roads will be in hardstanding, which will be of impervious material. Drainage will be to roadside gullies.

c. **Designs of Hard Standing Areas**

As with the access roads, all hard standing areas will be of impervious material. Drainage will be to a soak-pit.

d. **Plant**

See Attachment D.2 for details on anaerobic digestion plant.

e. **Wheel-Wash**

The entire site will be hardstanding, and as such, it is not envisaged that wheel cleaning will be a major issue. However, it is proposed to install a wheel wash facility. Clean water for washing will come from the onsite well. Waste water from the washing process will be collected and pumped into the Reception Tank for the Anaerobic Digesters.

f. **Laboratory Facilities**

It is not intended at this point in time to have laboratory facilities at the facility. Some testing will be done on site and this is described in Attachment D.2.d. In general, external accredited laboratory will be used.

g. **Design and Location of Fuel Storage Areas**

The fuel storage on site will be used to store mineral oil for use in the back up diesel generators and stand by boiler on site. These tanks will be located near the control/boiler building for use in the operation of the machinery and of a stand by boiler if there is maintenance works (see Anaerobic Digestion Layout Drawing). Any fuels stored on site will be kept in appropriately bunded areas as per EPA guidelines.

h. **Waste Quarantine Areas**

The most appropriate location for waste inspection is in the waste reception building. If waste is deemed unacceptable it will either be reloaded, in the case of a full load, or picked out in the case of specific non conforming wastes, for removal from the facility. There will be a designated area within the waste reception area for the storage of such items (waste

quarantine area). A daily inventory of any materials placed in quarantined will be maintained.

i. **Waste Inspection Areas**
See Waste Quarantine Area detail above.

j. **Traffic control**
The anaerobic digestion facility is located away from the public road. This eliminates the possibility of encroaching onto the public road. In addition the National Primary Route (N5) will be upgraded at the entrance to dedicated road to the BioPark incorporating the anaerobic digestion facility. Site management will control traffic around the facility, with traffic signs used for route designation. Car parking will be provided for visitors and for staff.

k. **Sewerage and Surface Water Drainage Infrastructure**
Drainage of the entire site will be strictly controlled.

The only location on the site where sewerage will be produced is at the site office. The sewerage form here will be transferred to a BioCycle treatment tank. The tank will be emptied on a regular basis and the contents will be introduced into the Anaerobic Digestion Reception tanks.

All surface water will be collected and transferred to a soak-pit. Surface water from hardstand areas will pass through oil-water separator before entering the soak pit.



l. **All other Services**
A grid connection application is in process which will allow electricity generated from the anaerobic digestion process to be exported to the national grid. It is expected the facility will generate some 0.5MW of electricity.

The site will be connected to an existing water well, for which details are provided in Appendix C1 of the EIS, to serve the office and staff welfare facilities. In keeping with modern practice, the site will be contactable using telephone, fax, internet (broadband) etc.

m. **All Plant Sheds, Garages and Equipment Compound**
The anaerobic digestion plant layout shows detail on plant for the facility.

n. **Site Accommodation**
A site office will be located at the facility.

o. **A Fire Control System, Including Water Supply**
In general, fires will be prevented by operating best practice including:

- Inspection of loads at the weighbridge
- Control of loads to ensure no burning or smouldering loads enter the facility
- Designation of smoking/non smoking areas
- Security.

The plant will be designed and provided with adequate fire protection and detection systems, which will be consistent with the requirements of the Building Regulations. The following measures will be implemented to improve safety and reduce the risk of emergency situations:

- Escape routes, alternative escape routes and emergency lighting will be provided in compliance with the requirements of the Building Regulations.
- The facility will comply with the requirements of the Irish Building Regulations Technical Guidance Documents on Fire Safety. A Fire Safety Certificate for the Facility will be obtained in due course.
- All employees will have training in emergency response and safe working practices etc. There will refresher training provided at regular intervals and dictated by audits of the standard operating procedures.
- In the event of a fire there is an emergency shutdown valve from the control/boiler room to the tanks. This will prevent excessive heat reaching the tanks.
- Fire and smoke alarms will be monitored from the facility control room and in the event the external emergency services will be contacted immediately.
- Fire extinguishers will be located near all electrical and control panels.
- The presence of the biogas flare allows for if deemed necessary in and emergency the burning off of all gases in the system to reduce the risk damage.

**Attachments D.1.p to D.1.u not applicable.**

## Attachment D.2 - Facility Operation

### D.2.a) Unit Operations of the Anaerobic Digestion Plant

The following are a list of the unit operations involved in the anaerobic digestion process with a brief description of each included.

The process should be looked at in conjunction with the attached process layout Drawing 2 (Process Technology) and Figure D.1 Anaerobic Digestion Layout.

A. Waste Delivery

Incoming loads of waste will be directed by plant personnel to the Reception building. The incoming lorry will proceed into the reception area after which the roller shutter door will close.

Suitable liquid sludge's (1%-15%DS (Dry Solids)) will be pumped to the low solids reception tank. Incoming wastes with a Dry Solids content of greater than 15% will be passed through a shredder and then transferred to the Anaerobic Digester feed tank. This feed tank will also be fed by the low solids reception tank to ensure a waste mix of suitable DS% content. There will also be a dedicated glycerol feed tank (30m3) to feed the Anaerobic Digester feed tank.

B. Odour Control

The proposed facility includes a bio filter to treat the displaced air from the reception building and reception tanks. This bio filter is equipped with a radial fan and a water scrubber to treat (adjust temperature and humidity) the displaced air in front of the bio filter in order to attain the minimum requirements for airborne emissions. There is a proposed air exchange rate of 3 times per hour for the reception building.



C. Anaerobic Digester Feed tank

The Anaerobic Digester feed tank will be a 500m3 covered tank. This tank will be linked to the odour control system for odour control management. This feed tank will be preheated.

D. Pasteurisation

The macerated waste will be pumped to the pre-pasteurisation process. The pasteurisation conditions are:

- Minimum temperature of 70degC
- Retention time of a minimum of 1 hour
- Particle size ≤12mm

The pasteurization stage operates as a batch pasteurization tank system. Temperature records of each batch will be recorded and archived. A heat recovery system will be used to recycle the heat from the pasteurisation stage to the Anaerobic Digestion feed tank. There will be an E-coli sampling station at this stage.

E. Digestion

The described digestion system will be designed for an organic waste throughput of 30,000 t/a. There are two 2000m3 digestion tanks. The minimum retention time for the proposed design is 23-25 days. The two digester tanks will be mixed to maintain a solution with a consistent Dry Matter content. Heating coils are present within the digester tanks to maintain the required temperature of average 38degC. Storage for the produced Biogas is provided by the two digester tanks which are equipped with a double membrane roof. The operational pressure is in the range of approximately 8 mbar. A variety of safeguards are incorporated in the specification

to guarantee the highest level of security in the biogas system, these include but are not limited to:

- over/ under pressure security valves protecting the digester
- A hydraulic overflow protection system.
- Flame stoppers in the gas pipes
- Different biogas pressure and level control instruments together with the security programmes in the PLC.
- An over pressure security valve protecting the biogas storage tank.
- Flare to burn the biogas in the case of an outage of gas motors.

F. Solid Separation

Post digestion the digestate can be spread as a fertiliser direct to land. A solids separation building has been included in the event that at some stage in the future it is decided to separate the solids and liquid fraction. In this event the digestate will be passed through two decanters within the Solid Separation building. This will separate the digestate into a solid and liquid fraction. The liquid fraction will be stored in the digestate storage tanks. The solid fraction will be stored in skips within the Solid Separation building. Currently it is not intended to separate the solids and liquids.

G. Digestate Storage

Digestate will be stored in the two digestate storage tanks (3,500m3, radius 13m). These tanks will provide storage of 150 days in order to conform to the Nitrates directive. This digestate will be used as an organic fertiliser. There will be a Salmonella sampling station at this stage.



H. Gas Scrubbing

All produced biogas will be passed through a gas scrubbing unit in order to remove trace impurities (i.e Hydrogen Sulphide) in the Biogas. This gas scrubbing unit will have a capacity of 360m3. This gas scrubber is designed to reduce H2S concentration from potentially high levels of 3,000mg/l to <500mg/l as required by the CHP system.

I. Combined Heat and Power Generator

The CHP boiler room will contain a 0.5MWe Combined Heat and Power generator. The electrical power produced by the Combined Heat and Power plant will be used to provide the complete electrical power demand for the Anaerobic Digestion plant. The boiler room will also house a 150kWt dual fuel oil-biogas boiler; this will serve as a back-up in the case of maintenance on the CHP unit. Heat produced by the CHP generator will be used to pre- heat the inputs in the Anaerobic digester feed tank, maintain the Anaerobic Digester tanks temperature of average 38degC.

J. Gas Flare

The gas flare is a safety measure in which in the event of an over pressure in the system the excess biogas will be flared.

K. Digestate Recirculation

Part of the digestate will be re-circulated back into the reception tank. Liquid digestate can be re-circulated to the reception tank to ensure that the incoming sludge's are of the correct consistency to allow easy handling. Recirculation pipes will be controlled by one-way valves.

**Anaerobic Digestion Plant Maintenance**

Maintenance for the plant will be carried out by specialized sub-contractors. The required maintenance for the CHP generator, pumps and other components that make up the Digestion plant will be scheduled by the Facility Manager. Full machine histories will be developed and from this an effective preventative maintenance program will be adopted.

**D.2 b) Flow Diagram of the Process**

See detail provided above and the attached process layout Drawing 2 (Process Technology)

**D.2.c) Details of any aspects of the facility that can cause emissions to the environment during normal operations and also in the event of a malfunction of interruption of services.**

Please see the EIS for information on the following:

- Noise (see Section 4.1.1, 4.1.2, 4.9 & 5.9 of the EIS)
- Odour (see Section 4.1.1, 4.1.2, 4.6 & 5.6 of the EIS & D.2a Unit Operations above). Background odour and bioaerosol monitoring will be carried out prior to commencement of activities on site
- Dust (see Section 4.1.1, 4.1.2, 4.7 & 5.7 of the EIS)
- Water ((see Section 4.5 of the EIS)

Under normal operation the CHP generator will generate emissions similar to that of a standard combustion engine. In the event of a malfunction the CHP generator would most likely cease operation. In this scenario the Biogas would be stored in the double membrane gas storage bag within each Anaerobic Digester tank until such a time as the CHP generator is operational again.



**D.2.d) Laboratory Facilities**

It is not intended at this point in time to have laboratory facilities at the facility. In general, external accredited laboratory will be used. There will be basic laboratory facilities on site. There will be both Salmonella and Ecoli testing points at critical points during the digestion process. Laboratory facilities will include:

- Oven (<=600deg C) for Volatile Solids and Dry Matter content testing
- Storage space for lab equipment and Salmonella and Ecoli samples.
- PH meter
- Portable gas analyser
- BOD and COD testing equipment

**ATTACHMENT D.2.a)**

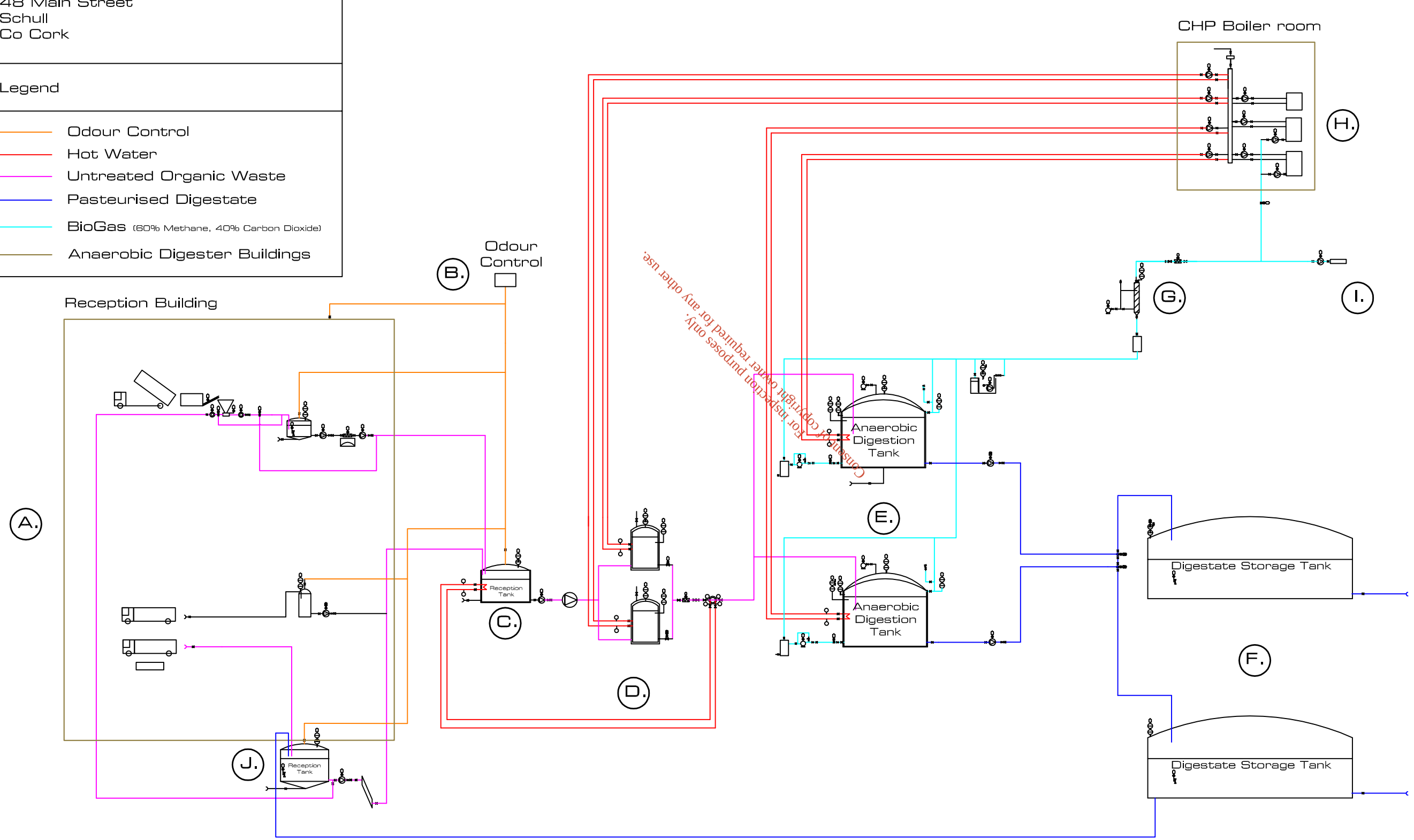
- Drawing 2 (Process Technology)
- Figure D.1 Anaerobic Digestion Layout

Drawing 2 (Process Technology)

Drawings prepared by:
Tony Dineen BEng Struct. MIEI.
BioPower Ltd
48 Main Street
Schull
Co Cork

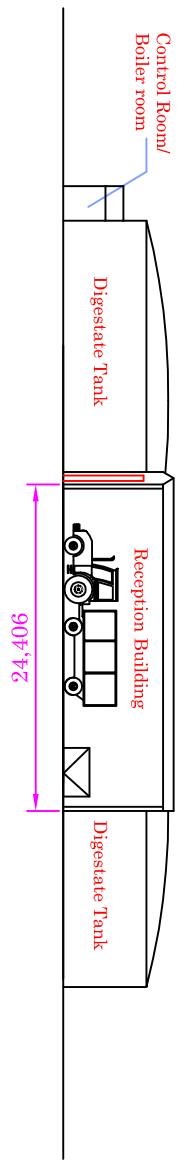
Legend

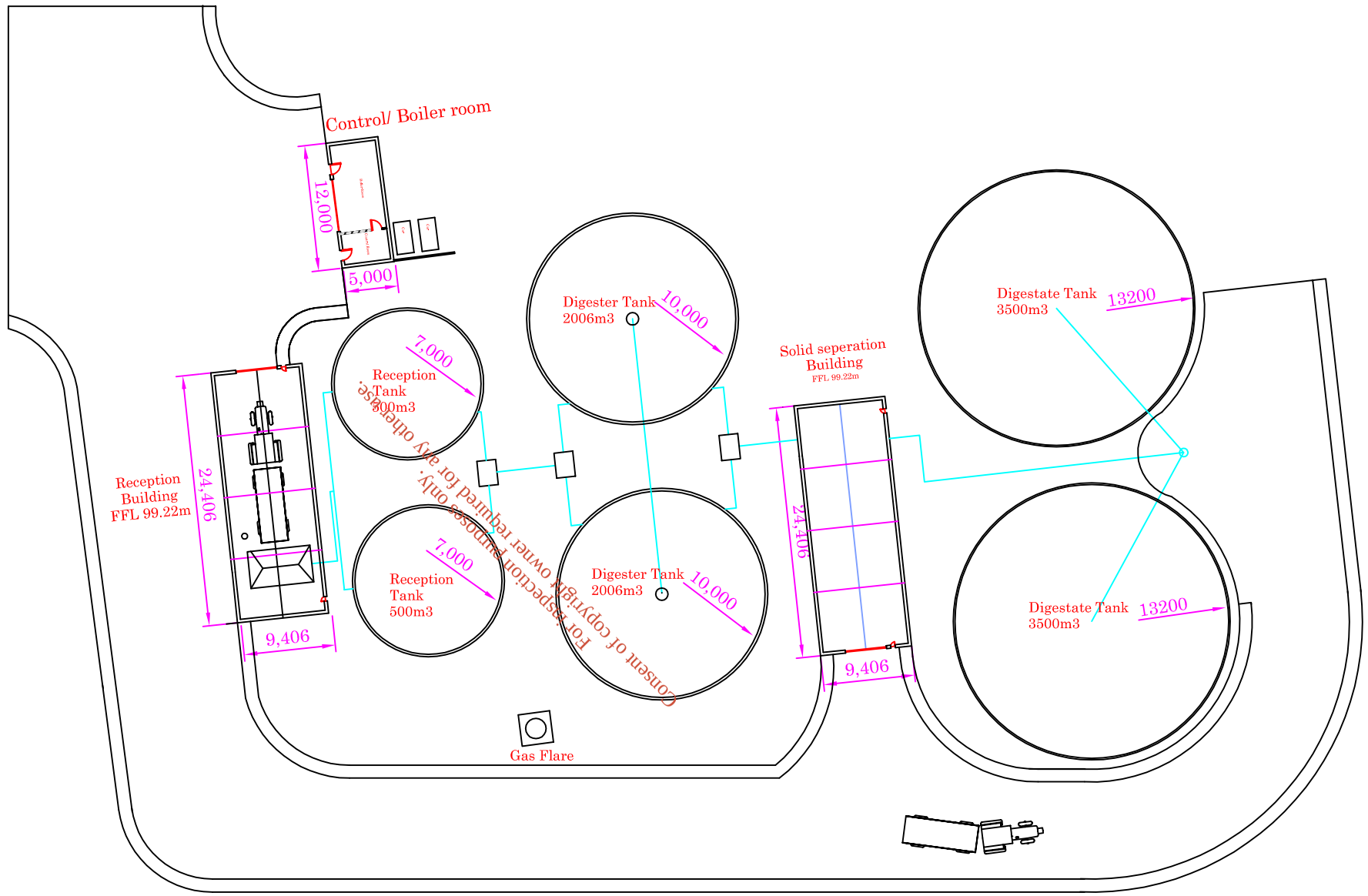
- Odour Control
- Hot Water
- Untreated Organic Waste
- Pasteurised Digestate
- BioGas (60% Methane, 40% Carbon Dioxide)
- Anaerobic Digester Buildings

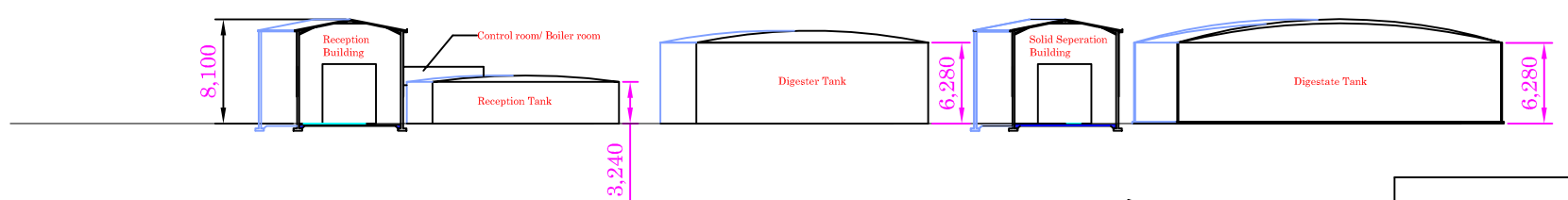


# Anaerobic Digestion Layout

## Figure D.1

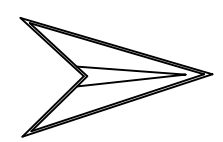



NOTES:
ALL BUILDING, CONSTRUCTION MATERIALS AND SPECIFICATIONS TO COMPLY WITH THE CURRENT BUILDING REGULATIONS AND THE DEPARTMENT OF THE ENVIRONMENT RECOMMENDATIONS. FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALE. CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE BEFORE STARTING WORK. ARCHITECT TO BE INFORMED OF ANY DISCREPENCIES BEFORE WORK PROCEEDS. LARGE SCALED DRAWINGS TAKE PREFERENCE OVER SMALLER DRAWINGS.

NOTES: All dimensions in mm



North

| Anaerobic Digestion layout | | |
|---|---|---|
| Drawings prepared by: Tim Clarke BSc MSc<br>Waste Works<br>Ventry,<br>Tralee,<br>Co.Kerry | | |
| Scale: NTS | Date: 11/12/09 | Drg No: Figure D1 |

## ATTACHMENT E EMISSIONS

### Attachment E.1 Emissions to Atmosphere

Emissions to the atmosphere are outlined in Sections 4.6 and 4.7 of the EIS.
Emissions to atmosphere include:

- Odour from the acceptance of waste and anaerobic digestion processes
- Dust emissions from movement of vehicles to and from the site
- Emissions from the energy utilisation plant (CHP unit) and flare.

### Attachment E.2 Emissions to Surface Water

Emissions to Water are discussed in Section 4.5 of the EIS. There will be no emissions to surface water.

### Attachment E.3 Emissions to Sewer

Not Applicable.

### Attachment E.4 Emissions to Groundwater

Emissions to Water are discussed in Section 4.5 of the EIS. There will be no direct discharges to groundwater.

### Attachment E.5 Noise Emissions

Noise emissions from the proposed facility are discussed in Section 4.9 of the EIS.

### Attachment E.6 Environmental Nuisance

Control of environmental nuisance is discussed below:



**Birds**

Birds can be a considerable nuisance in waste management facilities if there is source of food present for scavenging. Waste activities at the facility will be carried out within buildings. Doors to the building will be open for a limited amount of time, just sufficient to allow the vehicles enter and leave the building. In addition, all vehicles entering the site will be completely covered. This will minimise the potential for birds scavenging on site.

**Dust Control**

All processes will take place within the confines of dedicated buildings, which will minimise the potential for dust emissions. The reception building will be under negative pressure. The air from the waste reception hall will be discharged through a biofilter. Wheel washing and dust suppression of on-site roads by spraying with water during dry periods will also minimise dust generation.

**Fire Control**

See Attachment D.1.n for details on fire control

**Litter Control**

Litter will be controlled at the proposed facility as all waste being delivered to the site will be in enclosed or covered collection vehicles. In addition all waste acceptance and processing

activities will be conditioned within dedicated buildings e.g. waste reception hall. As a precaution regular litter patrols of the site perimeter and access road will be undertaken.

**Traffic Control**
See Attachment D.1.j for details on traffic control.

**Vermin Control**
Vermin and insects can potentially be a nuisance at waste management facilities. However, at the proposed facility, all operations will be carried out within dedicated buildings. Strict hygiene procedures will be put in place which will require the regular cleaning of all plant and waste acceptance areas. As a precautionary measure, ADPower Roscommon will retain a vermin control specialist to implement vermin control measures on site. The facility will be regularly inspected and the required measures will be taken if evidence of vermin is found on site.

**Road Cleansing**
In dry weather, site roads and any other areas used by vehicles will be sprayed with water as and when required to minimise airborne dust nuisance.

## ATTACHMENT F CONTROL & MONITORING

### Attachment F.1 Emissions and Abatement

*To Atmosphere*

Details of Air abatement controls are outlined in Attachment D2 above and in Sections 4 and 5 of the EIS.

*To Surface Water/Sewers/Groundwaters*

Details are outlined in Sections 4 and 5 of the EIS.

### Attachment F.2 – F.9 Monitoring and Sampling Points

The proposed monitoring and sampling points are shown in Figure F.1. Tables F.1 to F.5 outline the number and monitoring frequency for each parameter.

**Attachment F.2 Air**
See Table F.1 below

**Attachment F.3 Surface Water**
See Tables F.1 and F.3 below

**Attachment F.4 Sewer Discharge**
Not applicable.

**Attachment F.5 Groundwater**
Not applicable.

**Attachment F.6 Noise**
See Table F.1 below

**Attachment F7 Meteorological Data**
See Table F.1 below

**Attachment F.8 Leachate**
Not Applicable.

**Attachment F.9 Landfill Gas**
Not Applicable.

**Parameters/ Media to be Monitored**

Figure F.1 details the proposed monitoring locations for the facility. The Tables below summarise the proposed monitoring locations and frequency for the different media to be monitored.

**Table F.1: Proposed Monitoring Locations and Frequencies**

| Parameter | Location | Monitoring Frequency |
|---|---|---|
| Dust Deposition | D1 | Three times a year Note 1 |
| | D2 | Three times a year Note 1 |
| | D3 | Three times a year Note 1 |
| | D4 | Three times a year Note 1 |
| Noise | N1 | Annually |
| | N2 | Annually |
| | N3 | Annually |
| | N4 | Annually |
| Biofilter | A2-1 | Refer to Table F.2 |
| Surface Water | SW1 | Biannually (Refer to Table F.3) |
| | SW2 | Biannually (Refer to Table F.3) |
| Meteorological Monitoring | Nearest synoptic station | Refer to Table F.4 |
| Digestate Quality | Final Digestate | Monthly |
| Gas Utilisation Plant | A2-2 | Refer to Table F.5 |
| Gas Flare | A2-3 | Refer to Table F.5 |
| | | |

**Table F.2: Schedule of Monitoring for the Biofilter** Note 1

| Parameter | Monitoring Frequency | Analysis - Method/Technique |
|---|---|---|
| **Bed Media** | | |
| Odour assessment Note 2 | Daily | Subjective Inspection |
| Condition and depth of biofilter Note 3 | Daily | Visual Inspection |
| Moisture content | Bi-annually | Standard laboratory method |
| pH | Bi-annually | pH probe |
| Ammonia | Bi-annually | Standard laboratory method |
| Total viable counts | Bi-annually | Standard laboratory method |
| **Inlet and Outlet Gas** | | |
| Ammonia | Bi-annually | Colourimetric Indicator Tubes |
| Hydrogen sulphide | Bi-annually | Colourimetric Indicator Tubes |
| Mercaptans | Bi-annually | Colourimetric Indicator Tubes |

Note 1: A competent laboratory using standard and internationally acceptable techniques shall carry out the analyses.
Note 2: This subjective assessment to be carried out by a staff member immediately upon arriving on-site
Note 3: The biofilter shall be examined to ensure that no channelling is evident, and that moisture content is adequate.



## Surface Water Monitoring

Proposed surface water quality monitoring parameters and frequency are set out in Table F.3.

**Table F.3: Surface Water Monitoring**

| Parameter | Monitoring Frequency | Analysis Method/Technique |
|---|---|---|
| pH | Biannually | Electrometry |
| Biochemical Oxygen Demand | Biannually | Standard Method |
| Suspended Solids | Biannually | Standard Method |
| Total Nitrogen | Biannually | Standard Method |
| Total Ammonia | Biannually | Standard Method |
| Total Phosphorus (as P) | Biannually | Standard Method |
| Chemical Oxygen Demand | Biannually | Standard Method |

| | | |
|---|---|---|
| Electrical Conductivity | Biannually | Standard Method |
| Temperature | Biannually | Standard Method |
| Fats oils, & grease | Biannually | Standard Method |

**Table F.4: Meteorological Monitoring**

| Parameter | Monitoring Frequency |
|---|---|
| Precipitation Volume | Monthly |
| Wind Force and Direction | Daily |

Data to be obtained from the nearest weather station.

**Digestate Quality**

Analysis to include pH, total and available (NH4) nitrogen, total phosphorus, potassium, sulphur, lead, cadmium, chromium, mercury, copper, zinc, nickel

**Gas Flare and Gas Utilisation Plant**

The gas utilisation plant and gas flare will be monitored in accordance with Table F.5.

**Table F.5: Monitoring of Gas Utilisation Plant**

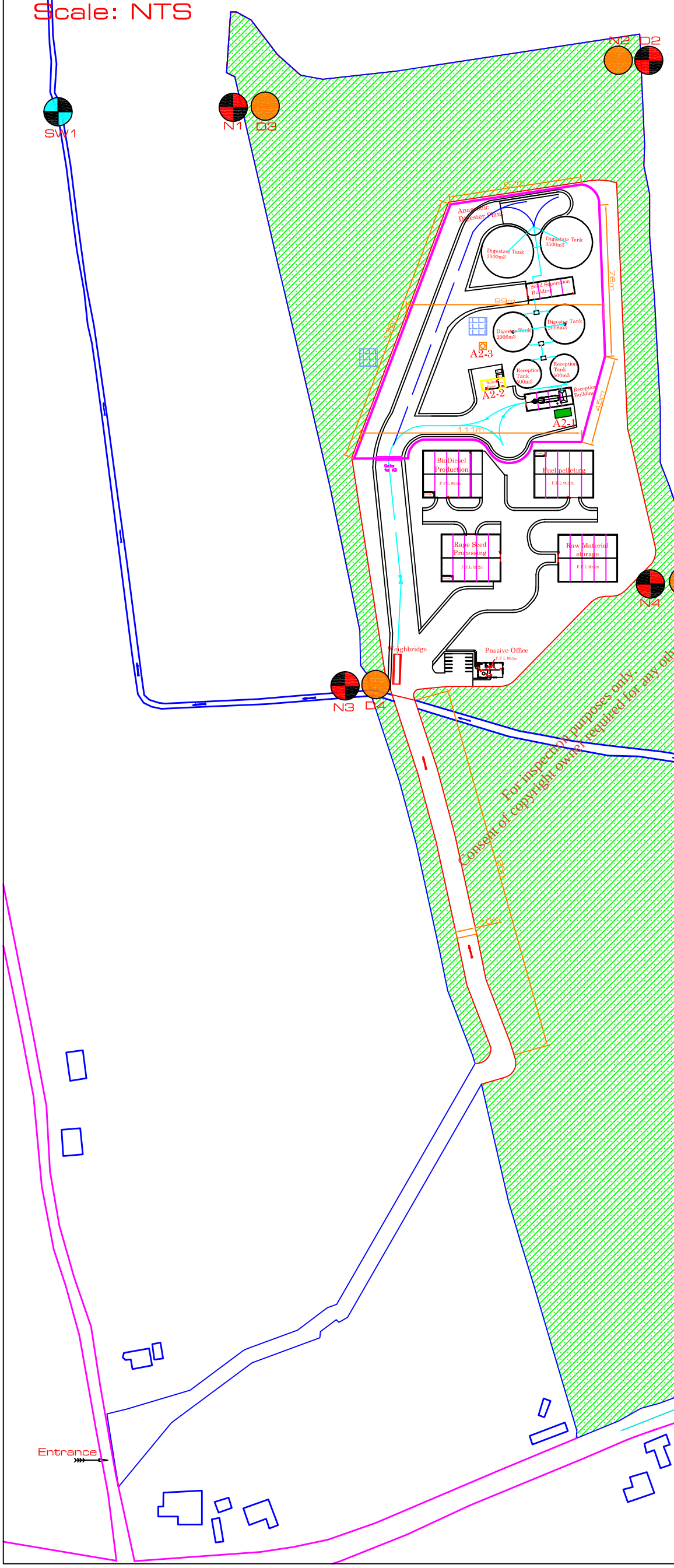
| Parameter | Monitoring Frequency | Analysis Method/Technique |
|---|---|---|
| **Inlet** | | |
| Carbon dioxide ($CO_2$)%v/v | Weekly | Infrared analyser/ thermal conductivity |
| Oxygen ($O_2$) %v/v | Weekly | Electrochemical/thermal conductivity |
| Methane ($CH_4$) %v/v | Weekly | Infrared analyser or equivalent approved |
| **Process Parameters** | | |
| Combustion Temperature | Continuous | Temperature Probe/datalogger |
| Residence Time | Quarterly | To be agreed |
| **Outlet** | | |
| CO | Biannually | Flue gas analyser/ |
| NOX (NO2 and NO) | Annually | Flue gas analyser/ |
| SO2 | Annually | Flue gas analyser/ |
| Total Particulates (PM10)2 | Annually | Isokinetic/Gravimetric |

**ATTACHMENT F2**

- Figure F.1 Proposed Monitoring Locations

# Monitoring Locations

Scale: NTS






## Legend

- Site Boundary
- Anaerobic Digestion Plant Boundry
- Percolation area for storm water runoff
- On Site Road way
- Existing forestry
- Weighbridge
- Bore hole
- Stream
- Road
- Existing buildings
- Site Contours (TBM=100m)
- Biofilter
- Noise Monitoring station
- Surface water monitoring station
- Dust/ air monitoring
- Gas Utilisation Plant (CHP Engine)
- Gas Flare

Figure F.1
Proposed Monitoring Locations

Drawing prepared by:
Tony Dineen BEng Struct. MIEI .
BioPower ltd
48 Main Street
Schull
Co Cork

Based on OSi map: Digital map :1918-B 1918-D

Scale: NTS | Drg No: Fig. F.1 | Date: 19/12/09

## ATTACHMENT G. RESOURCE USE AND ENERGY EFFICIENCY

### Attachment G.1 Raw Materials and Product

The purpose of the facility is to convert biodegradable waste into energy through anaerobic digestion. The main raw material for the process is the biodegradable waste. To meet Animal By-Products Regulations requirements certain disinfectants will be required at the site. The chemicals used will be selected from the Department of Agriculture and Food approved list for facilities falling under the Animal By-Products Regulations. Diesel, lubricating oil and hydraulic oil will be used in the waste processing equipment. An onsite well will be used to provide water for the facility. The exact quantities to be used are unknown but will be continuously monitored from commencement of operation to improve efficiencies.

### Attachments G.2 Energy Efficiency

The anaerobic digestion will generate energy (electricity and heat). It is expected that 0.5MWe will be generated and the exact quantity will depend on the waste types being processed. Energy (electricity and heat) generated from the process will be used in the process. An energy audit will be conducted annually to ensure energy is being used efficiently.

## ATTACHMENT H – MATERIALS HANDLING

### Attachment H.1 Waste Types and Quantities

It is proposed to accept up to 24,999 tonnes per annum at the facility. It is requested that licence conditions give flexibility to the makeup of this overall tonnage of 24,999 tonnes per annum. The target is to accept up to 20,000 tonnes per annum of source separated biodegradable waste, 2,500 tonnes of industrial non hazardous sludges and 2,499 tonnes of sewage sludges. However the makeup of these waste streams will vary and the applicant does not wish to be restricted to the part tonnages but will adhere to the total tonnage.

The following waste types by EWC Code will be accepted at the facility.

| Waste material | EWC Code | Main Source |
|---|---|---|
| Plant-tissue waste | 02 01 03 | Wastes from agriculture, horticulture & forestry |
| Sludges from washing and cleaning | 02 02 01 | Wastes from the preparation and processing of meat, fish and other foods of animal origin |
| Animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site | 02 01 06 | Wastes from the preparation and processing of meat, fish and other foods of animal origin |
| Materials unsuitable for consumption or processing | 02 02 03 | Wastes from the preparation and processing of meat, fish and other foods of animal origin |
| Sludges from on-site effluent treatment | 02 02 04 | Wastes from the preparation and processing of meat, fish and other foods of animal origin |
| Waste not otherwise specified | 02 02 99 | Wastes from the preparation and processing of meat, fish and other foods of animal origin |
| Sludges from washing, cleaning, peeling, centrifuging and separation | 02 03 01 | Wastes from fruit, vegetable & cereal … |
| Materials unsuitable for consumption or processing | 02 03 04 | Wastes from fruit, vegetable & cereal … |
| Sludges from on-site effluent treatment | 02 03 05 | Wastes from fruit, vegetable & cereal … |
| Wastes not otherwise specified | 02 03 99 | Wastes from fruit, vegetable & cereal … |
| Materials unsuitable for consumption or processing | 02 05 01 | Wastes from the dairy products industry |
| Sludges from on-site effluent treatment | 02 05 02 | Wastes from the dairy products industry |
| Wastes not otherwise specified | 02 05 99 | Wastes from the dairy products industry |
| Materials unsuitable for consumption or processing | 02 06 01 | Wastes from the baking and confectionery industry |
| Sludges from on-site effluent treatment | 02 06 03 | Wastes from the baking and confectionery industry |
| Waste not otherwise specified | 02 06 99 | Wastes from the baking and confectionery industry |
| Wastes from spirits distillation | 02 07 02 | Wastes from the production of alcoholic and non-alcoholic beverages |
| Materials unsuitable for consumption or processing | 02 07 04 | Wastes from the production of alcoholic and non-alcoholic beverages |
| Sludges from on-site effluent treatment | 02 07 05 | Wastes from the production of alcoholic and non-alcoholic beverages |
| Waste not otherwise specified | 02 07 99 | Wastes from the production of alcoholic and non-alcoholic beverages |
| Sludges from the physico/chemical treatment other than those mentioned in 19 02 05 | 19 02 06 | wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation) |
| Sludges from the treatment of industrial waste water | 19 08 04 | wastes from waste water treatment plants not otherwise specified |

| | | |
|---|---|---|
| sludges from treatment of urban waste water | 19 08 05 | wastes from waste water treatment plants not otherwise specified |
| Sludges from other treatment of industrial waste water other than those mentioned in 19 08 13 | 19 08 14 | wastes from waste water treatment plants not otherwise specified |
| Biodegradable kitchen and canteen waste | 20 01 08 | Municipal wastes including separately collected fractions |
| Edible oil and fat | 20 01 25 | Municipal wastes including separately collected fractions |
| Biodegradable waste | 20 02 01 | Garden and park wastes |
| Septic tank sludges | 20 03 04 | other municipal wastes |

**Attachment H.2 Waste Acceptance Procedures**

Attachment D.2 above provides details on the facility operations at the facility. Standard operating procedures for the acceptance, handling and processing of waste will be developed prior to commencement of waste operations at the facility

**Attachment H.3 Waste Handling**

See above

**Attachment H.4 Waste Arisings**

No waste arisings are expected from the process

## ATTACHMENT I - EXISTING ENVIRONMENT AND IMPACT OF THE FACILITY

**Attachment I.1 – Assessment of Atmospheric Emissions**
Section 4 of the EIS assesses the existing air quality and the potential impacts of the proposed environment.

**Attachment I.2 – Assessment of impacts of surface water discharges on the receiving waters**
Section 4.5 of the EIS assesses the existing quality of receiving surface waters in the vicinity of the site and the potential impacts of the proposed environment. There will be no emissions to surface water.

**Attachment I.3 – Assessment of Impact on receiving sewer**
Not applicable.

**Attachment I.4 – Assessment of impact of groundwater and soils**
Section 4 of the EIS assesses the geology and hydrogeology in the existing environment and the potential impacts of the proposed environment.

**Attachment I.5 – Ground and/or groundwater contamination**
Sections 4 of the EIS assess the geology and hydrogeology in the existing environment and the potential impacts of the proposed environment.

**Attachment 1.6 – Noise Impacts**
Section 4.9 of the EIS assesses noise levels in the existing environment and the potential noise impacts of the proposed environment.

**Attachment I.7 – Assessment of Ecological Impacts and Mitigation Measures**
Section 4.3 of the EIS details the ecological assessment that was carried out, as well as the mitigation measures proposed.

## ATTACHMENT J - ACCIDENT PREVENTION AND EMERGENCY RESPONSE

**Attachment J.1 – Accident Prevention and Emergency Response**
It is not anticipated that the operation of the facility will present any danger to the public. Access to the site will be restricted to employees, hauliers and pre-arranged visitors. All visitors, once on site, will be accompanied by a member of staff at all times. Procedures will be put in place to ensure the health and safety of all persons entering the site.

**Fire**
It is envisaged that the nature of the operation does not pose a major risk of fire although, as a minimum, the following steps will be taken to ensure an acceptable level of fire safety:

- Training of all site operatives and employees in fire prevention and control;
- Prominent posting of emergency response contact numbers (fire service, gardai, ambulance and other agencies)
- The provision of on-site water supply
- The provision of fire fighting equipment in the site office
- There will be no long term storage of waste on-site.

All buildings will be equipped with heat and smoke sensors so that in the event of a fire both the site management and emergency services can be quickly alerted.

**Safety Procedures On-Site**
Safety procedures will be developed specific to the site. These procedures will apply to the entire site area. The safety procedures will be constantly reviewed by a safety officer and the operators of the facility. The facility will be operated in full accordance with documented procedures, including operational procedures, emergency procedures, etc. All processes will be continuously monitored and recorded. Regular safety audits will be carried out on site to ensure the safety of all personnel working on or visiting the facility.



All processes will be carried out within dedicated buildings. Vehicular traffic movements within the site will be restricted and monitored and all traffic movements will be subject to strict procedures, in full accordance with health and safety requirements.

The facility will operate under a waste licence issued by the Environmental Protection Agency. The licence will, when issued, require the licensee to *inter alia* have the following procedures/systems in place:

- full training for all employees
- An updated environmental management system (EMS) that will require the licensee to set objectives and targets for environmental control at the site. The EMS will also require a complete set of documented procedures for operations and environmental controls at the site.
- Emergency Response Procedures: - this document will set out all procedures that, in the event of an emergency, will be undertaken by personnel at the facility. The document will contain a list of contact names and numbers for emergency personnel.

**Operational Failure of Plant and Equipment/Emergency Breakdown**
Breakdown of equipment will be handled by prompt repair and/or replacement of equipment. Equipment on-site is maintained on a regular basis. In the event of long-term breakdown of equipment or plant waste will be diverted to an authorised facility.

## ATTACHMENT K - REMEDIATION, DECOMISSIONING, RESTORATION AND AFTERCARE

It is anticipated that the plant will be operated indefinitely. However if the facility should close for some unforeseen reason all waste and all equipment will be removed from the facility. Waste would be removed to authorised facilities. Equipment would be recycled where possible. The building where waste activities are proposed would remain and would likely be used again.

An Environmental Liabilities Risk Assessment will be prepared for the facility and will be submitted to the Agency once the facility is operational.

## ATTACHMENT L - STATUTORY REQUIREMENTS

**Attachment L.1 – Statutory Requirements**
The information submitted in the Waste Licence Application and it's attachments, including the Environmental Impact Statement complies fully with Section 40 (4) [(a) to (i)] of the Waste Management Acts.

Best Available Techniques (BAT) will be used throughout the development. The extensive waste management and experience of BioPower/ ADPower Roscommon Limited will ensure BAT is implemented.

**Attachment L.2 Fit and Proper Person**
ADPower Roscommon Ltd is a special purpose company established in 2009 to develop the facility at Roscommon. AD Power Roscommon Ltd is a 100% subsidiary of BioPower Ltd.

BioPower was formed just over 2 years ago and has been in a project development phase of operations. BioPower is now moving towards the commercial phase of operations and intends to be the leading force in the crucial Waste to Energy sector. Over the course of the next 5 years BioPower intends to roll out 30 BioParks® which will include anaerobic digestion treatment, across the UK & Ireland with the capability of handling in excess of 800,000 tons of 'environmentally & politically challenging' waste streams (Sewage Sludge, Industrial Sludge, Organic/Food Waste).

BioPower will convert these streams into Energy Rich Solutions:

- BioGas;
- Electricity & Heat; and
- high value Fertilisers.



The Applicant (ADPower Roscommon Limited) or BioPower have never been convicted under the Waste Management Acts 1996 to 2008, the EPA Act 1992 and 2003, the Local Government (Water Pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.

Attachment C.1 outlines the applicant's technical knowledge and qualifications.

Since ADPower Roscommon Ltd was only established in 2009 it has no financial history. Details of BioPowers most recent audited accounts are attached. As one would expect these reflect that the company is in development phase. Financial provisions will be put in place to address risk liabilities. The cost of managing, developing, operating, and monitoring the facility will be borne by the applicant.

**ATTACHMENT L.2**

- BioPowers Audited Accounts

# BIOPOWER LIMITED

# REPORTS AND FINANCIAL STATEMENTS

# FOR THE YEAR ENDED 30 SEPTEMBER 2008

**BIOPOWER LIMITED**

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**BIOPOWER LIMITED**

**DIRECTORS AND OTHER INFORMATION**

| | |
|---|---|
| **DIRECTORS** | Donall O'Laoire<br>William Daunt<br>Walter Ryan-Purcell |
| **COMPANY SECRETARY** | Walter Ryan-Purcell |
| **COMPANY NUMBER** | 355995 |
| **REGISTERED OFFICE** | 48 Main Street<br>Schull<br>Co. Cork |
| **AUDITORS** | Deloitte & Touche<br>Chartered Accountants & Registered Auditors<br>No. 6 Lapp's Quay<br>Cork |
| **BUSINESS ADDRESS** | 48 Main Street<br>Schull<br>Co Cork |
| **BANKERS** | AIB Bank<br>Ballincollig<br>Co.Cork |
| **SOLICITORS** | Ronan Daly Jermyn<br>12 South Mall<br>Cork |

# DIRECTORS' REPORT

The directors present their annual report together with the audited financial statements for the year ended 30 September 2008.

## PRINCIPAL ACTIVITY AND REVIEW OF THE BUSINESS

The principal activity of the company is to provide energy from waste and agricultural products.

## FINANCING AND STRUCTURE

The company is currently funded by a commitment of continued financial support from the parent company Biopower Group Public Limited Company that will enable the company to continue to trade for the foreseeable future. For further information refer to Note 2 to the financial statements.

## FUTURE DEVELOPMENTS

The directors do not foresee any significant change to the company's operations in the short to medium term.

| RESULTS FOR THE YEAR | 2008 | 2007 |
|---|---|---|
| | € | € |
| Loss for the financial year amounted to | (67,960) | (104,805) |

The directors do not recommend the payment of a final dividend in respect of the year ended 30 September 2008.



## POST BALANCE SHEET EVENTS

There have been no significant events affecting the company since the year end.

## DIRECTORS

The present membership of the Board is set out on page 2. On 4 December 2007, Walter Ryan-Purcell was appointed as director and secretary to the company. On the same date Donall O'Laoire resigned as company secretary. All other directors served throughout the year.

## BOOKS AND RECORDS

To ensure that proper books and accounting records are kept in accordance with Section 202 of the Companies Act, 1990, the directors have employed appropriately qualified accounting personnel and have maintained appropriate computerised accounting systems. The books of account are located at the company's registered office.

## DIRECTORS' AND SECRETARY'S INTERESTS IN SHARES

The directors and secretary of the company who held office at 30 September 2008 did not have any interests in the shares of the company.

The directors and secretary had interests in the shares of Biopower Group Public Limited Company, the parent company as follows:

| | | No. of shares held | |
|---|---|---|---|
| Director | Type of shareholding | 30/09/08 | 01/10/07 |
| Donall O'Laoire | Ordinary Shares €0.01 each | 850,000 | 850,000 |
| William Daunt | Ordinary Shares €0.01 each | 175,000 | 175,000 |
| Walter Ryan-Purcell (Director and Secretary) | Ordinary Shares €0.01 each | 2,000,000 | - |

## AUDITORS

The auditors, Deloitte & Touche, Chartered Accountants & Registered Auditors, have expressed their willingness to continue in office in accordance with the provisions of Section 160(2) of the Companies Act, 1993.

On behalf of the Board

) Walter Ryan-Purcell
) DIRECTORS William Daunt
)

Date: 11 August 2009

## BIOPOWER LIMITED

## STATEMENT OF DIRECTORS' RESPONSIBILITIES

---

Irish company law requires the directors to prepare financial statements for each financial year which give a true and fair view of the state of the affairs of the company and of the profit or loss of the company for that year. In preparing those financial statements, the directors are required to:

- select suitable accounting policies and apply them consistently;

- make judgements and estimates that are reasonable and prudent; and

- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors are responsible for keeping proper books of account which disclose with reasonable accuracy at any time the financial position of the company and to enable them to ensure that the financial statements are prepared in accordance with accounting standards generally accepted in Ireland and comply with Irish statute comprising the Companies Acts 1963 to 2009. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Deloitte.

Deloitte & Touche
Chartered Accountants &
Registered Auditors

# INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOPOWER LIMITED

We have audited the financial statements of Biopower Limited for the year from incorporation to 30 September 2008 which comprise the Profit and Loss Account, the Balance Sheet and the related notes (1 to 16). These financial statements have been prepared under the accounting policies set out therein.

This report is made solely to the company's members, as a body, in accordance with Section 193 of the Companies Act 1990. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members, as a body, for our audit work, for this report, or for the opinions we have formed.



**Respective responsibilities of directors and auditors**

The directors are responsible for preparing the financial statements as set out in the Statement of Directors' Responsibilities in accordance with applicable law and accounting standards issued by the Accounting Standards Board and published by the Institute of Chartered Accountants in Ireland (Generally Accepted Accounting Practice in Ireland).

Our responsibility, as independent auditors, is to audit the financial statements in accordance with relevant legal and regulatory requirements and International Standards on Auditing (UK and Ireland).

We report to you our opinion as to whether the financial statements give a true and fair view in accordance with Generally Accepted Accounting Practice in Ireland, and are properly prepared in accordance with Irish statute comprising the Companies Acts 1963 to 2009. We also report to you whether, in our opinion, proper books of account have been kept by the company; whether, at the balance sheet date, there exists a financial situation requiring the convening of an extraordinary general meeting of the company; and whether the information given in the directors' report is consistent with the financial statements. In addition, we state whether we have obtained all information and explanations necessary for the purposes of our audit and whether the company's balance sheet and profit and loss account are in agreement with the books of account.

We also report to you if, in our opinion, any information specified by law regarding directors' remuneration and directors' transactions is not disclosed and, where practicable, include such information in our report.

We read the Directors' Report and we consider the implications for our report if we become aware of any apparent mis-statement within it. Our responsibilities do not extend to other information.

*(Continued on next page)*

*(Continued from previous page)*

## INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOPOWER LIMITED

**Basis of audit opinion**

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the directors in the preparation of the financial statements and whether the accounting policies are appropriate to the company's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material mis-statement, whether caused by fraud or other irregularity or error. In forming our opinion we evaluated the overall adequacy of the presentation of information in the financial statements.



**Opinion**

In our opinion the financial statements:

* give a true and fair view, in accordance with Generally Accepted Accounting Practice in Ireland of the state of the affairs of the company as at 30 September 2008 and of the loss for the year then ended; and
* have been properly prepared in accordance with the Companies Acts 1963 to 2009.

*Emphasis of Matter- Going Concern*

Without qualifying our opinion, we draw your attention to Note 2 to the financial statements which indicates that the company incurred a loss during the year of €67,960 and had net liabilities of €171,765 at the balance sheet date. These conditions indicate the existence of a uncertainty which may cast doubt about the company's ability to continue as a going concern. The company is dependent on and has obtained written confirmation of continued support from the company's parent company for a period of not less than twelve months from the date of approval of the financial statements. The report of the auditors on the financial statements of the parent company for the year ended 30 September 2008 draws attention to the existence of a material uncertainty which may cast significant doubt about the company's ability to continue as a going concern, which is particularly dependent on fund-raising activity including a share issue currently in progress. The directors have prepared the financial statements of the company on the basis that the company is a going concern. The financial statements do not include the adjustments that would result if the company was unable to continue as a going concern.

*(Continued on next page)*

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## INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOPOWER LIMITED

We have obtained all the information and explanations we considered necessary for the purposes of our audit. In our opinion proper books of account have been kept by the company. The company's balance sheet and its profit and loss account are in agreement with the books of account.

In our opinion, the information given in the directors' report is consistent with the financial statements.

The liabilities of the company exceed the assets of the company, as stated on the balance sheet and, in our opinion, on that basis there did exist at 30th September 2008, a financial situation which under Section 40(1) of the Companies (Amendment) Act 1983 may require the convening of an extraordinary general meeting of the company.

Deloitte & Touche
Chartered Accountants and Registered Auditors
Cork

Date: 11 August 2009

## BIOPOWER LIMITED

## PROFIT AND LOSS ACCOUNT
## FOR THE YEAR ENDED 30 SEPTEMBER 2008

| | Notes | 2008 € | 2007 € |
|---|---|---|---|
| Administrative expenses | | (67,017) | (118,319) |
| Other operating income | | - | 18,235 |
| **OPERATING LOSS -continuing operations** | | (67,017) | (100,084) |
| Interest payable and similar charges | 4 | (943) | (4,721) |
| **LOSS ON ORDINARY ACTIVITIES BEFORE TAXATION** | 5 | (67,960) | (104,805) |
| Taxation on loss on ordinary activities | 6 | - | - |
| **LOSS ON ORDINARY ACTIVITIES AFTER TAXATION** | | (67,960) | (104,805) |

There are no recognised gains or losses other than the loss for the financial year as disclosed in the profit and loss account.

The financial statements were approved by the Board of Directors on 11 August 2009 and signed on its behalf by

) Walter Ryan Purcell
)
) DIRECTORS
) William Daunt
)

## BIOPOWER LIMITED

## BALANCE SHEET
## AS AT 30 SEPTEMBER 2008

| | Notes | 2008 € | 2007 € |
|---|---|---|---|
| **FIXED ASSETS** | | | |
| Tangible assets | 7 | 278,931 | 20,325 |
| **CURRENT ASSETS** | | | |
| Debtors | 8 | 18,230 | 5,897 |
| Cash at bank and in hand | | 694 | 5.177 |
| | | 18,924 | 11,074 |
| **CREDITORS (Amounts falling due within one year)** | 9 | (13,276) | (12,893) |
| **NET CURRENT ASSETS** | | 5,648 | (1,819) |
| **TOTAL ASSETS LESS CURRENT LIABILITIES** | | 284,579 | 18,506 |
| **CREDITORS (Amounts falling due after more than one year)** | 10 | (456,344) | (122,311) |
| **NET LIABILITIES** | | (171,765) | (103,805) |
| **CAPITAL AND RESERVES** | | | |
| Called up share capital | 11 | 1,000 | 1,000 |
| Profit and loss account | 12 | (172,765) | (104,805) |
| **SHAREHOLDERS' DEFICIT** | 13 | (171,765) | (103,805) |



The financial statements were approved by the Board of Directors on 11 August 2009 and signed on its behalf by

) Walter Ryan Parnell
) DIRECTORS
) William Daunt

## 1. STATEMENT OF ACCOUNTING POLICIES

The significant accounting policies adopted by the company are as follows:

### BASIS OF PREPARATION

The financial statements have been prepared in accordance with accounting standards generally accepted in Ireland and Irish statute comprising the Companies Acts, 1963 to 2009.

### ACCOUNTING CONVENTION

The financial statements have been prepared under the historical cost convention.

### TURNOVER

Turnover represents the invoiced amount of services provided, net of value added tax.

### DEPRECIATION OF TANGIBLE ASSETS

Fixed assets are stated at cost, provision is made for depreciation on all tangible assets, at rates calculated to write off the cost of each asset over its expected useful life, as follows:

| | |
|---|---|
| Plant and office equipment | 10% Straight line basis |
| Leased motor vehicles | 20% Straight line basis |

The company is involved in the building of BioParks. The company is actively looking at various sites for development. All clearly identifiable preplanning costs in relation to site development have been capitalised in the financial statements. The costs in relation to sites for which planning has been received are classified under site costs and the sites for which planning has not yet been received are classified under site development costs. These assets will be depreciated once the plants are completed and the rate will be in line with the rate of depreciation of these plants. If any of the sites are refused planning these costs will be written off to the profit and loss account.



### LEASING AND HIRE PURCHASE COMMITMENTS

Assets obtained under hire purchase contracts and finance leases are capitalised as tangible assets and depreciated over the shorter of the lease term and their useful lives. Obligations under such agreements are included in creditors net of the finance charge allocated to future periods.

Rentals in respect of all other leases are charged to the profit and loss account as incurred.

### RESEARCH AND DEVELOPMENT

Research expenditure is written off to the profit and loss account in the year in which it is incurred.

### GOVERNMENT GRANTS

Grants towards revenue expenditure are released to the profit and loss account as the related expenditure is incurred.

### CASH FLOW STATEMENT

The company meets the size criteria for a small company set by the Companies (Amendment) Act, 1986 and therefore, in accordance with FRS 1: Cash Flow Statements, it has not prepared a cash flow statement.

## 2. BASIS OF PREPARING THE FINANCIAL STATEMENTS

The company incurred a loss during the year of €67,960 and had net liabilities of €171,765 at the balance sheet date. The company is in a start up situation and expects to open its first BioPark in 2010. During this time, the company will continue to be supported by, and has obtained written confirmation of continuing support from Biopower Group Public Limited Company, for a period of not less than 12 months from the date of approval of the financial statements. The company is also involved in a fundraising campaign, and the directors are confident that it will be successful in this regard.

The financial statements of the parent company indicate that the directors are confident that fundraising activity including a share issue currently in progress will be sufficient to finance its investing activities and working capital requirements and to meet its liabilities as they fall due and for a period of not less than twelve months from the date of approval of the financial statements.

On this basis the directors consider that it is appropriate to prepare the financial statements on the going concern basis, which assumes that the company will continue in operational existence for the foreseeable future. The financial statements do not include any adjustments to the carrying amount and classification of assets and liabilities that would arise if the company was unable to continue as a going concern.



## 3. EMPLOYEES AND REMUNERATION

**Number of employees**

The average number of persons employed by the company during the year was:

| | 2008 Number | 2007 Number |
|---|---|---|
| Management and administration | 1 | 1 |

| **The staff costs are comprised of :-** | 2008 € | 2007 € |
|---|---|---|
| Wages and salaries | 13,847 | 4,577 |
| Social welfare costs | 1,073 | 492 |
| | 14,920 | 5,069 |

The directors did not receive any remuneration during the year.

## 4. INTEREST PAYABLE AND SIMILAR CHARGES

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| On bank loans and overdrafts | - | 3,813 |
| Lease finance charges | 943 | 908 |
| | 943 | 4,721 |

## 5. LOSS ON ORDINARY ACTIVITIES BEFORE TAXATION

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| Loss on ordinary activities before taxation is stated after charging: | | |
| Depreciation of tangible assets | 3,869 | 3,869 |
| Auditors' remuneration | 1,200 | 1,000 |

## 6. TAXATION ON LOSS ON ORDINARY ACTIVITIES

No charge to taxation arises due to losses incurred.

## 7. TANGIBLE ASSETS

| | Site Development Costs | Site Costs | Plant & office equipment | Leased motor vehicles | Total |
|---|---|---|---|---|---|
| | € | € | € | € | € |
| **Cost** | | | | | |
| At 1 October 2007 | - | - | 9,694 | 14,500 | 24,194 |
| Additions | 207,789 | 54,686 | - | - | 262,475 |
| At 30 September 2008 | 207,789 | 54,686 | 9,694 | 14,500 | 286,669 |
| **Depreciation** | | | | | |
| At 1 October 2007 | - | - | 969 | 2,900 | 3,869 |
| Charge for the year | - | - | 969 | 2,900 | 3,869 |
| At 30 September 2008 | - | - | 1,938 | 5,800 | 7,738 |
| **Net book values** | | | | | |
| At 30 September 2008 | 207,789 | 54,686 | 7,756 | 8,700 | 278,931 |
| At 30 September 2007 | - | - | 8,725 | 11,600 | 20,325 |

The basis by which depreciation is calculated is stated in Note 1.
The basis by which site costs and site development costs are capitalised is stated in Note 1.



## 8. DEBTORS

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| **Amounts falling due within one year:-** | | |
| Amount owed to Biopower Energy Savings Limited | 12,891 | - |
| VAT recoverable | 5,289 | 5,897 |
| Other debtors and prepayments | 50 | - |
| | 18,230 | 5,897 |

| 9. CREDITORS (Amounts falling due within one year) | 2008 € | 2007 € |
|---|---|---|
| Net obligations under finance leases (Note 14) | 5,355 | 4,666 |
| Other taxes and social security costs | - | 473 |
| Accruals | 7,921 | 7,754 |
| | 13,276 | 12,893 |

| Other taxes and social security costs | 2008 € | 2007 € |
|---|---|---|
| PAYE/PRSI payable | - | 473 |
| Total taxes and social security costs | - | 473 |

| 10. CREDITORS (Amounts falling due after more than one year) | 2008 € | 2007 € |
|---|---|---|
| Net obligations under finance leases (Note 14) | 1,645 | 7,002 |
| Directors' loan | 12,350 | 12,350 |
| Amount owed to Biopower Group Plc | 442,349 | 102,959 |
| | 456,344 | 122,311 |



| 11. CALLED UP SHARE CAPITAL | 2008 € | 2007 € |
|---|---|---|
| **Authorised :** | | |
| 500,000 ordinary shares of €1.00 each | 500,000 | 500,000 |
| **Allotted, called up and fully paid equity :** | | |
| 1,000 ordinary shares of €1.00 each | 1,000 | 1,000 |

## 12. PROFIT AND LOSS ACCOUNT

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| Profit and loss account brought forward | (104,805) | - |
| Loss for the year | (67,960) | (104,805) |
| Profit and loss account carried forward | (172,765) | (104,805) |

## 13. RECONCILIATION OF MOVEMENTS IN SHAREHOLDERS' DEFICIT

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| Loss for the year | (67,960) | (104,805) |
| Opening shareholders' funds | (103,805) | 1,000 |
| Closing shareholders' deficit | (171,765) | (103,805) |



## 14. FINANCIAL COMMITMENTS

At 30 September 2008 the company had finance lease obligations, net of interest, due as follows:

| Leased motor vehicles | 2008 | 2007 |
|---|---|---|
| | € | € |
| **Expiry date:** | | |
| Within one year | 5,355 | 4,666 |
| Between two and five years | 1,645 | 7,002 |
| | 7,000 | 11,668 |

The basis by which lease obligations are capitalised is stated in Note 1.

## 15. GROUP MEMBERSHIP

The company is a subsidiary of Biopower Group Public Limited Company, a company incorporated in the Republic of Ireland.

## 16. RELATED PARTY TRANSACTIONS

During the year the company had a number of transactions with its parent company Biopower Group Public Limited Company and Biopower Energy Savings Limited. The balances owed by the parent company are disclosed in Note 8 and Note 10.

## BIOPOWER LIMITED

## SCHEDULES TO THE PROFIT AND LOSS ACCOUNT
## FOR THE YEAR ENDED 30 SEPTEMBER 2008

| | 2008<br>€ | 2007<br>€ |
|---|---|---|
| **ADMINISTRATIVE EXPENSES** | | |
| Wages and salaries | 13,847 | 4,577 |
| Employer's PRSI contributions | 1,073 | 492 |
| Staff training | 350 | - |
| Management expenses | 50,990 | - |
| Rent | 7,583 | 4,043 |
| Insurance | 798 | 131 |
| Light and heat | 57 | 361 |
| Hire of meeting rooms | 1,025 | - |
| Printing and stationery | 6,682 | 1,257 |
| Advertising and promotion costs | 3,206 | 3,157 |
| Telephone and postage | 2,061 | 3,217 |
| Computer costs | 440 | 1,730 |
| Motor, travel & conference expenses | - | 9,326 |
| Design, development & research costs | - | 11,158 |
| Legal and professional | - | 12,615 |
| Consultancy fees | (30,691) | 57,607 |
| Audit and accountancy fees | 3,300 | 3,290 |
| Bank charges | 135 | 1,004 |
| Sundry | 1,492 | 385 |
| Subscriptions | 800 | 100 |
| Depreciation | 3,869 | 3,869 |
| | 67,017 | 118,319 |
| **Other operating income** | | |
| Feasibility Grant | - | 18,235 |
| | - | 18,235 |

**BIOPOWER LIMITED**

**ADDITIONAL INFORMATION NOT COVERED BY THE AUDITORS' REPORT**

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**Biopower Limited**

Deloitte & Touche
Chartered Accountants & Registered Auditors
No. 6 Lapp's Quay
Cork

Dear Sirs,

We confirm to the best of our knowledge and belief, and having made appropriate enquiries of other officials of the company (and where appropriate, inspection of evidence) sufficient to satisfy ourselves that we can properly make each of the following representations given to you in connection with your audit of the company's financial statements for the year ended 30 September 2008 .

1. We acknowledge as directors our responsibilities under the Companies Acts 1963 to 2009 for preparing financial statements for the company which give a true and fair view and for making accurate representations to you.

2. There have been no significant transactions with the directors and officers of the company and its subsidiaries, and other related parties, other than those which are included in the notes to the financial statements.

3. That at no time during the year has the company had any arrangement, transaction or agreement to provide credit facilities (including loans, quasi-loans or credit transactions) for directors (or persons connected with them) or to guarantee or provide security for such matters (except as disclosed in the notes to the accounts)

4. We confirm that all errors known to us, or identified by you in the course of your audit and communicated to us, were adjusted.

5. **Books & Records**
To the best of our knowledge and belief all transactions undertaken by the company have been properly recorded in the accounting records and these financial statements and all relevant records have been given to you.

6. **Profit and Loss Account**
Except as disclosed in the financial statements, the results for the year were not materially affected by:

(a) transactions of a sort not usually undertaken by the company,
(b) circumstances of an exceptional or non-recurrent nature,
(c) charges or credits relating to prior periods or
(d) any change in the basis of accounting.

Any expenditure included in the financial statements (where receipts or vouchers were not available) was properly made in connection with the carrying on of the company's business, unless specifically notified to you as being of a private nature.

*(continued on next page)*

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**7. Fixed Assets**

(a) The company has a satisfactory title to all fixed assets included in the financial statements.

(b) The fixed assets to which the company has satisfactory title are included in the financial statements.

(c) All amounts of expenditure capitalised in respect of fixed assets as detailed in the financial statements represent expenditure incurred in acquiring additional assets or improving existing assets. No expenditure capitalised is of a revenue nature.

(d) All costs in relation to preplanning of various sites have been capitalised. All costs in relation to sites which do not get planning with be written off at this point.

**8. Bank & Cash**

The balances disclosed in the financial statements for bank and cash balances held at year end reflects all bank accounts and cash balances held by the company at year-end. We confirm that the company has legal title to these amounts as stated in the financial statements.

We confirm that no bank accounts except as disclosed in the financial statements have been opened in the name of the company.

**9. Debtors**

Balances included in the financial statements are all valid debtors or prepayments. The bad debts written off are complete as far as the directors are aware and full provision has been against specific debts which are known or may be expected to be irrecoverable.

**10. Liabilities**

All known liabilities of material amount at 30 September 2008 are shown in the financial statements including the liability for all purchases to which title has passed prior to 30 September 2008 .

**11. Capital Commitments**

At 30 September 2008 there were no commitments for capital expenditure.

**12. Contingent Liabilities**

No contingent liabilities existed at 30 September 2008.

**13. Post Balance Sheet Events**

No events have occurred between 30 September 2008 and the date of this letter which could materially affect the financial statements.

**14. Going Concern**

We have prepared the accounts on a going concern basis. The parent company have signed a letter undertaking to continue to provide whatever financial assistance is necessary to enable the company to continue to trade for a period of twelve months from the date of approval of these financial statements.

The directors confirm their willingness to financially support the company for the foreseeable future.
We confirm that the above representations are made on the basis of adequate enquiries of management and staff (and where appropriate, inspection of evidence) sufficient to satisfy ourselves that we can properly make each of the above representations to you.

Yours faithfully,

)
)
) **DIRECTORS**
)
)

# BIOPOWER GROUP PUBLIC LIMITED COMPANY
# AND SUBSIDIARY COMPANIES

## ANNUAL REPORT AND
## CONSOLIDATED FINANCIAL STATEMENTS

## FOR THE YEAR ENDED 30 SEPTEMBER 2008

**BIOPOWER GROUP PUBLIC LIMITED COMPANY AND SUBSIDIARY COMPANIES**

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## ANNUAL REPORT AND CONSOLIDATED FINANCIAL STATEMENTS


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## DIRECTORS AND OTHER INFORMATION

| | |
|---|---|
| **DIRECTORS** | Donall O'Laoire<br>Michael Holland<br>Timothy Clarke<br>Michael Griffin<br>Walter Ryan-Purcell<br>Dr. Colin J. Campbell<br>Dr. Bernard Rice<br>William Daunt |
| **COMPANY SECRETARY** | Walter Ryan-Purcell |
| **COMPANY NUMBER** | 437014 |
| **REGISTERED OFFICE** | 48 Main Street<br>Schull<br>Co. Cork |
| **AUDITORS** | Deloitte & Touche<br>Chartered Accountants & Registered Auditors<br>No. 6 Lapp's Quay<br>Cork |
| **BUSINESS ADDRESS** | 48 Main Street<br>Schull<br>Co Cork |
| **BANKERS** | AIB Bank<br>Ballincollig<br>Co.Cork |
| **SOLICITORS** | Ronan Daly Jermyn<br>12 South Mall<br>Cork |

# DIRECTORS' REPORT

The directors present their annual report together with the audited financial statements of the Group for the year ended 30 September 2008.

## GROUP ACTIVITIES

Biopower Group Public Limited Company (the "Company") and its subsidiary undertakings (the "Group") are involved in the bio energy sector.

## FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The directors have considered financial risk management issues and are satisfied with the policies that are in place to address these issues.

## FUTURE DEVELOPMENTS

The directors do not foresee any significant change to the group's operations in the short to medium term.

## SUBSIDIARY COMPANIES

The subsidiary companies included in these consolidated financial statements are as follows:-

Biopower Limited

Biopower Energy Savings Limited



## GROUP RESULTS FOR THE YEAR AND DIVIDENDS

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| Loss for the financial year amounted to | (261,381) | (197,814) |

The directors do not recommend the payment of a final dividend in respect of the year ended 30 September 2008 (30 September 2007: €Nil).

## POST BALANCE SHEET EVENTS

There have been no significant events affecting the group since the year end. The group is currently engaged in a share issue to generate sufficient funds to finance its investing activities and working capital requirements and to meet its liabilities as they fall due for a period of not less than 12 months from the date of approval of the financial statements.

## DIRECTORS

The present membership of the Board is set out on page 2.

On 14 December 2007 Donall O'Laoire resigned as secretary and Walter Ryan-Purcell was appointed as secretary and director of the company. On 11 February 2008 Stephen O'Keeffe and Kevin Donovan were appointed as directors to the company. Kevin Donovan resigned on 28 November 2008 and Stephen O'Keeffe resigned on 20 January 2009. All other directors served throughout the year.

# DIRECTORS' REPORT

## BOOKS AND RECORDS

To ensure that proper books and accounting records are kept in accordance with Section 202 of the Companies Act, 1990, the directors have employed appropriately qualified accounting personnel and have maintained appropriate computerised accounting systems. The books of account are located at the company's registered office.

## DIRECTORS' AND SECRETARY'S INTERESTS IN SHARES

The directors and secretary had interests in the shares of Biopower Group Public Limited Company, the parent company as follows:

| Director | Type of shareholding | No. of shares held 30/09/08 | 01/10/07 |
|---|---|---|---|
| Donall O'Laoire | Ordinary Shares €0.01 each | 850,000 | 850,000 |
| Michael Holland | Ordinary Shares €0.01 each | 100,000 | 100,000 |
| Timothy Clarke | Ordinary Shares €0.01 each | 150,000 | 150,000 |
| Michael Griffin | Ordinary Shares €0.01 each | 100,000 | 100,000 |
| Dr. Colin J. Campbell | Ordinary Shares €0.01 each | 150,000 | 150,000 |
| William Daunt | Ordinary Shares €0.01 each | 150,000 | 150,000 |
| Walter Ryan-Purcell (Director and Secretary) | Ordinary Shares €0.01 each | 2,000,000 | - |



## AUDITORS

The auditors, Deloitte & Touche, Chartered Accountants and Registered Auditors, have expressed their willingness to continue in office in accordance with the provisions of Section 160(2) of the Companies Act, 1963.

On behalf of the Board

) Walter Ryan-Purcell
)
) DIRECTORS
)
) Donall O'Laoire

Date: 11 August 2009

## STATEMENT OF DIRECTORS' RESPONSIBILITIES

Irish company law requires the directors to prepare financial statements for each financial year which give a true and fair view of the state of the affairs of the company and of the profit or loss of the company for that period. In preparing those financial statements, the directors are required to:

- select suitable accounting policies and apply them consistently;

- make judgements and estimates that are reasonable and prudent; and

- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors are responsible for keeping proper books of account which disclose with reasonable accuracy at any time the financial position of the company and to enable them to ensure that the financial statements are prepared in accordance with accounting standards generally accepted in Ireland and comply with Irish statute comprising the Companies Acts 1963 to 2009 and the European Communities (Companies: Group Accounts) Regulations, 1992. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Deloitte.

Deloitte & Touche
Chartered Accountants &
Registered Auditors

# INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOWPOWER GROUP PUBLIC LIMITED COMPANY AND SUBSIDIARY COMPANIES

We have audited the financial statements of Biopower Group Public Limited Company for the year ended 30 September 2008 which comprise the Consolidated Profit and Loss Account, the Consolidated Balance Sheet, the Company Balance Sheet and the related notes (1 to 23). These financial statements have been prepared under the accounting policies set out therein.

This report is made solely to the company's members, as a body, in accordance with Section 193 of the Companies Act 1990. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members, as a body, for our audit work, for this report, or for the opinions we have formed.



**Respective responsibilities of directors and auditors**

The directors are responsible for preparing the financial statements, as set out in the Statement of Directors' Responsibilities in accordance with applicable law and accounting standards issued by the Accounting Standards Board and published by the Institute of Chartered Accountants in Ireland (Generally Accepted Accounting Practice in Ireland).

Our responsibility, as independent auditors, is to audit the financial statements in accordance with relevant legal and regulatory requirements and International Standards on Auditing (UK and Ireland).

We report to you our opinion as to whether the financial statements give a true and fair view in accordance with Generally Accepted Accounting Practice in Ireland, and are properly prepared in accordance with Irish statute comprising the Companies Acts 1963 to 2009 and the European Communities (Companies: Group Accounts) Regulations, 1992. We also report to you whether, in our opinion, proper books of account have been kept by the company; whether, at the balance sheet date, there exists a financial situation requiring the convening of an extraordinary general meeting of the company; and whether the information given in the Directors' Report is consistent with the financial statements. In addition, we state whether we have obtained all information and explanations necessary for the purposes of our audit and whether the company's balance sheet and profit and loss account are in agreement with the books of account.

We also report to you if, in our opinion, any information specified by law regarding directors' remuneration and directors' transactions is not disclosed and, where practicable, include such information in our report.

We read the Directors' Report and we consider the implications for our report if we become aware of any apparent mis-statement within it. Our responsibilities do not extend to other information.

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## INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOWPOWER GROUP PUBLIC LIMITED COMPANY AND SUBSIDIARY COMPANIES

**Basis of audit opinion**

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the directors in the preparation of the financial statements and whether the accounting policies are appropriate to the company's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material mis-statement, whether caused by fraud or other irregularity or error. In forming our opinion we evaluated the overall adequacy of the presentation of information in the financial statements.



**Opinion**

In our opinion the financial statements:

* give a true and fair view, in accordance with Generally Accepted Accounting Practice in Ireland of the state of the affairs of the company and the group as at 30 September 2008 and of the loss for the year then ended; and
* have been properly prepared in accordance with the Companies Acts 1963 to 2009 and the European Communities (Companies: Group Accounts) Regulations, 1992.

*Emphasis of Matter- Going Concern*

Without qualifying our opinion, we draw your attention to Note 2 to the financial statements which indicates that the group incurred a loss during the year of €261,381. This condition indicates the existence of a material uncertainty which may cast significant doubt about the group's ability to continue as a going concern. The group is currently dependent on raising funds and the directors are confident that the share issue currently in progress will succeed and will generate sufficient funds to finance the group's investing activity and working capital requirements and to meet its liabilities as they fall due for a period of at least twelve months from the date of approval of the financial statements. The directors have prepared the financial statements of the group on the basis that the group is a going concern. The financial statements do not include the adjustments that would result if the group was unable to continue as a going concern.

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## INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOWPOWER GROUP PUBLIC LIMITED COMPANY AND SUBSIDIARY COMPANIES

We have obtained all the information and explanations we considered necessary for the purposes of our audit. In our opinion proper books of account have been kept by the company. The company's balance sheet and its profit and loss account are in agreement with the books of account.

In our opinion, the information given in the Directors' Report is consistent with the financial statements.

The net assets of the company, as stated in the balance sheet are less than half the amount of its called-up share capital and, in our opinion, on that basis there did exist at 30 September 2008, a financial situation which under Section 40(1) of the Companies (Amendment) Act 1983 may require the convening of an extraordinary general meeting of the company.

Deloitte & Touche
Chartered Accountants & Registered Auditors
Cork

Date: 11 August 2009

## CONSOLIDATED PROFIT AND LOSS ACCOUNT
## FOR THE YEAR ENDED 30 SEPTEMBER 2008

| | Notes | 2008 € | 2007 € |
|---|---|---|---|
| **Turnover - continuing operations** | 3 | 18,894 | - |
| Administrative expenses | | (276,723) | (210,095) |
| Other operating income | | - | 18,235 |
| **OPERATING LOSS -continuing operations** | | (257,829) | (191,860) |
| Interest payable and similar charges | 5 | (3,552) | (5,954) |
| **LOSS ON ORDINARY ACTIVITIES BEFORE TAXATION** | 6 | (261,381) | (197,814) |
| Taxation on loss on ordinary activities | 7 | - | - |
| **LOSS ON ORDINARY ACTIVITIES AFTER TAXATION** | | (261,381) | (197,814) |



There are no recognised gains or losses other than the loss for the financial year as disclosed in the profit and loss account.

The financial statements were approved by the Board of Directors on 11 August 2009 and signed on its behalf by

) Walter Ryan-Purcell
)
) DIRECTORS
)
)

## BIOPOWER GROUP PUBLIC LIMITED COMPANY AND SUBSIDIARY COMPANIES

### CONSOLIDATED BALANCE SHEET
### AS AT 30 SEPTEMBER 2008

| | Notes | 2008 € | 2007 € |
|---|---|---|---|
| **FIXED ASSETS** | | | |
| Tangible assets | 9 | 420,519 | 154,688 |
| **CURRENT ASSETS** | | | |
| Debtors | 11 | 19,829 | 9,461 |
| Cash at bank and in hand | | 49,234 | 144,802 |
| | | 69,063 | 154,263 |
| **CREDITORS (Amounts falling due within one year)** | 12 | (37,796) | (51,713) |
| **NET CURRENT ASSETS** | | 31,267 | 102,550 |
| **TOTAL ASSETS LESS CURRENT LIABILITIES** | | 451,786 | 257,238 |
| **CREDITORS (Amounts falling due after more than one year)** | 13 | (20,481) | (36,052) |
| **NET ASSETS** | | 431,305 | 221,186 |
| **CAPITAL AND RESERVES** | | | |
| Called up share capital | 14 | 64,190 | 54,760 |
| Share premium account | 15 | 826,310 | 364,240 |
| Profit and loss account | 16 | (459,195) | (197,814) |
| **SHAREHOLDERS' FUNDS** | 17 | 431,305 | 221,186 |



The financial statements were approved by the Board of Directors on 11 August 2009
and signed on its behalf by

) Walter Ryan-Purcell
) DIRECTORS
) D O'Leary

## COMPANY BALANCE SHEET
## AS AT 30 SEPTEMBER 2008

| | Notes | 2008 € | 2007 € |
|---|---|---|---|
| **FIXED ASSETS** | | | |
| Tangible assets | 9 | 130,751 | 134,363 |
| Financial assets | 10 | 1,002 | - |
| | | 131,753 | 134,363 |
| **CURRENT ASSETS** | | | |
| Debtors | 11 | 515,359 | 106,523 |
| Cash at bank and in hand | | 42,106 | 139,625 |
| | | 557,465 | 246,148 |
| **CREDITORS (Amounts falling due within one year)** | 12 | (19,182) | (38,820) |
| **NET CURRENT ASSETS** | | 538,283 | 207,328 |
| **TOTAL ASSETS LESS CURRENT LIABILITIES** | | 670,036 | 341,691 |
| **CREDITORS (Amounts falling due after more than one year)** | 13 | (6,486) | (16,700) |
| **NET ASSETS** | | 663,550 | 324,991 |
| **CAPITAL AND RESERVES** | | | |
| Called up share capital | 14 | 64,190 | 54,760 |
| Share premium account | 15 | 826,310 | 364,240 |
| Profit and loss account | 16 | (226,950) | (93,009) |
| **SHAREHOLDERS' FUNDS** | 17 | 663,550 | 325,991 |



The financial statements were approved by the Board of Directors on 11 August 2009
and signed on its behalf by

) Walter Ryan-Purcell
) DIRECTORS
) D O'Mahoney

## 1. STATEMENT OF ACCOUNTING POLICIES

The significant accounting policies adopted by the group are as follows:

### BASIS OF PREPARATION

The financial statements have been prepared in accordance with accounting standards generally accepted in Ireland and Irish statute comprising the Companies Acts, 1963 to 2009 and the European Communities (Companies: Group Accounts) Regulations, 1992.

### BASIS OF ACCOUNTING

The financial statements have been prepared under the historical cost convention.

### BASIS OF CONSOLIDATION

The group's financial statements include the results of the company and all of its operating subsidiaries.

### TURNOVER

Turnover represents the invoiced amount of services provided, net of value added tax.



### TANGIBLE FIXED ASSETS AND DEPRECIATION

Land is stated at cost, provision is made for depreciation on all tangible assets, at rates calculated to write off the cost of each asset over its expected useful life, as follows:

| | |
|---|---|
| Plant and office equipment | 10% Straight line basis |
| Leased motor vehicles | 20% Straight line basis |

The group is involved in the building of BioParks. The group is actively looking at various sites for development. All clearly identifiable preplanning costs in relation to site development have been capitalised in the financial statements. The costs in relation to sites for which planning has been received are classified under site costs and the sites for which planning has not yet been received are classified under site development costs. These assets will be depreciated once the plants are completed and the rate will be in line with the rate of depreciation of these plants. If any of the sites are refused planning these costs will be written off to the profit and loss account.

### LEASING AND HIRE PURCHASE COMMITMENTS

Assets obtained under hire purchase contracts and finance leases are capitalised as tangible assets and depreciated over the shorter of the lease term and their useful lives. Obligations under such agreements are included in creditors net of the finance charge allocated to future periods.

Rentals in respect of all other leases are charged to the profit and loss account as incurred.

### FINANCIAL ASSETS

The value of the investments in the subsidiaries is valued at the lower of cost and their estimated net realisable value. Where the directors are of the opinion that there has been a diminution in the value of financial assets, then the decrease in value is written off to the profit and loss account.

## 1.1 STATEMENT OF ACCOUNTING POLICIES (Continued)

### RESEARCH AND DEVELOPMENT

Research expenditure is written off to the profit and loss account in the year in which it is incurred.

### GOVERNMENT GRANTS

Grants towards revenue expenditure are released to the profit and loss account as the related expenditure is incurred.

### CASHFLOW STATEMENT

The company meets the size criteria for a small company set by the Companies (Amendment) Act, 1986 and therefore, in accordance with FRS 1: Cash Flow Statements, it has not prepared a cash flow statement.

## 2 GOING CONCERN AND BASIS OF PREPARING THE FINANCIAL STATEMENTS

The group incurred a loss during the year of €261,381 and has accumulated losses since commencement of €459,195. The group is engaged in investing in the bio energy industry and the initial period is anticipated to extend for a period of years, before the group achieves profitability.



The group is currently dependent on fundraising activity and the directors are confident that the fundraising activity, currently in progress, will be successful and will generate sufficient funds to finance the group's investing activity and working capital requirements and to meet its liabilities as they fall due for a period of not less than twelve months from the date of approval of the financial statements.

The financial statements do not include any adjustments to the carrying amount and classification of assets and liabilities that would arise if the group was unable to continue as a going concern.

## 3. TURNOVER

The total turnover of the group for the year has been derived from its principal activity wholly undertaken in Ireland.

## 4. EMPLOYEES AND REMUNERATION

**Number of employees**
The average number of persons employed by the group during the year was:

| | 2008 Number | 2007 Number |
|---|---|---|
| Management and administration | 4 | 3 |

| **The aggregate payroll costs of these persons were as follows:** | **2008** € | **2007** € |
|---|---|---|
| Wages and salaries | 118,697 | 9,642 |
| Social welfare costs | 12,076 | 982 |
| | 130,773 | 10,624 |

The directors did not receive any remuneration during the year.



## 5. INTEREST PAYABLE AND SIMILAR CHARGES

| | 2008 € | 2007 € |
|---|---|---|
| On bank loans and overdrafts | - | 3,813 |
| Lease finance charges | 3,552 | 2,141 |
| | 3,552 | 5,954 |

## 6. LOSS ON ORDINARY ACTIVITIES BEFORE TAXATION

| | 2008 € | 2007 € |
|---|---|---|
| Loss on ordinary activities before taxation is stated after charging: | | |
| Depreciation of tangible assets | 11,541 | 10,049 |
| Auditors' remuneration | 13,498 | 6,790 |

## 7. TAXATION ON LOSS ON ORDINARY ACTIVITIES

No charge to taxation arises in the current year or in 2007 as the group has incurred losses in both years.

## 8. LOSS FOR THE YEAR

As permitted by Section 3(2) of the Companies (Amendment) Act, 1986 the profit and loss account of the holding company is not presented as part of these financial statements. The loss in the financial statements of the company before taxation was €133,941 (2007: loss of €93,009).

## 9. TANGIBLE ASSETS

| (a) Group | Site Development € | Land € | Site Costs € | Plant & office equipment € | Leased motor vehicles € | Total € |
|---|---|---|---|---|---|---|
| **Cost** | | | | | | |
| At 1 October 2007 | - | 107,945 | - | 13,092 | 43,700 | 164,737 |
| Additions | 207,789 | - | 54,686 | 14,897 | - | 277,372 |
| At 30 September 2008 | 207,789 | 107,945 | 54,686 | 27,989 | 43,700 | 442,109 |
| **Depreciation** | | | | | | |
| At 1 October 2007 | - | - | - | 1,309 | 8,740 | 10,049 |
| Charge for the year | - | - | - | 2,801 | 8,740 | 11,541 |
| At 30 September 2008 | - | - | - | 4,110 | 17,480 | 21,590 |
| **Net book values** | | | | | | |
| At 30 September 2008 | 207,789 | 107,945 | 54,686 | 23,879 | 26,220 | 420,519 |
| At 30 September 2007 | - | 107,945 | - | 11,783 | 34,960 | 154,688 |



| (b) Company | Land € | Plant & office equipment € | Leased motor vehicles € | Total € |
|---|---|---|---|---|
| **Cost** | | | | |
| At 1 October 2007 | 107,945 | 3,398 | 29,200 | 140,543 |
| Additions | - | 2,856 | - | 2,856 |
| At 1st October 2007 | | | | |
| At 30 September 2008 | 107,945 | 6,254 | 29,200 | 143,399 |
| **Depreciation** | | | | |
| At 1 October 2007 | - | 340 | 5,840 | 6,180 |
| Charge for the year | - | 628 | 5,840 | 6,468 |
| At 1st October 2007 | | | | |
| At 30 September 2008 | - | 968 | 11,680 | 12,648 |
| **Net book values** | | | | |
| At 30 September 2008 | 107,945 | 5,286 | 17,520 | 130,751 |
| At 30 September 2007 | 107,945 | 3,058 | 23,360 | 134,363 |

The basis by which depreciation is calculated is stated in Note 1.

| 10. FINANCIAL ASSETS | Company 2008 | 2007 |
|---|---|---|
| | € | € |
| Opening shares at cost | 1,000 | 1,000 |
| Share additions at cost | 2 | - |
| | 1,002 | 1,000 |

The company owns 100% of the share capital of Biopower Limited and Biopower Energy Savings Limited, whose registered offices are 48 Main Street, Schull, Co.Cork, Ireland. The principal activity of the companies is developing the infrastructure and technologies for BioEnergy production and related services. The investment comprises of 1,000 ordinary shares of €1 each in Biopower Limited and 2 ordinary shares of €1 each in Biopower Energy Saving Limited.

| 11. DEBTORS | Group | | Company | |
|---|---|---|---|---|
| | 2008 | 2007 | 2008 | 2007 |
| | € | € | € | € |
| **Amounts falling due within one year:-** | | | | |
| Amounts owed by - Biopower Limited | - | - | 442,348 | 102,959 |
| Amounts owed by - Biopower Energy Savings Ltd | - | - | 59,305 | - |
| VAT recoverable | 19,777 | 9,461 | 13,706 | 3,564 |
| Other debtors and prepayments | 52 | - | - | - |
| | 19,829 | 9,461 | 515,359 | 106,523 |

| 12. CREDITORS (Amounts falling due within one year) | Group 2008 € | 2007 € | Company 2008 € | 2007 € |
|---|---|---|---|---|
| Net obligations under finance leases (Note 18) | 15,671 | 13,642 | 10,316 | 8,976 |
| Other taxes and social security costs | 2,189 | 1,309 | 2,189 | 836 |
| Accruals | 19,936 | 36,762 | 6,677 | 29,008 |
| | 37,796 | 51,713 | 19,182 | 38,820 |

| Other taxes and social security costs. | Group 2008 € | 2007 € | Company 2008 € | 2007 € |
|---|---|---|---|---|
| PAYE/PRSI payable | 2,189 | 1,309 | 2,189 | 836 |
| Total taxes and social security costs | 2,189 | 1,309 | 2,189 | 836 |

| 13. CREDITORS (Amounts falling due after more than one year) | Group 2008 € | 2007 € | Company 2008 € | 2007 € |
|---|---|---|---|---|
| Net obligations under finance leases (Note 18) | 8,131 | 23,702 | 6,486 | 16,700 |
| Directors' loan | 12,350 | 12,350 | - | - |
| | 20,481 | 36,052 | 6,486 | 16,700 |

## 14. CALLED UP SHARE CAPITAL

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| **Authorised :** | | |
| 10,000,000 ordinary shares of €0.01 each | 100,000 | 100,000 |
| **Allotted, called up and fully paid equity :** | | |
| 6,419,000 ordinary shares of €0.01 each (2007: 5,476,000 ordinary shares of €0.01 each) | 64,190 | 54,760 |

During the period, the company alloted 943,000 ordinary shares with a nominal value of €9,430 and at a premium of €462,070.



## 15. SHARE PREMIUM ACCOUNT

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| At 1 October 2007 | 364,240 | - |
| Share premium increase | 462,070 | 364,240 |
| At 30 September 2008 | 826,310 | 364,240 |

## 16. PROFIT AND LOSS ACCOUNT

| | Group | | Company | |
|---|---|---|---|---|
| | 2008 | 2007 | 2008 | 2007 |
| | € | € | € | € |
| Profit and loss account brought forward | (197,814) | - | (93,009) | - |
| Loss for the year | (261,381) | (197,814) | (133,941) | (93,009) |
| Profit and loss account carried forward | (459,195) | (197,814) | (226,950) | (93,009) |

## 17. RECONCILIATION OF MOVEMENTS IN SHAREHOLDERS' FUNDS

| | Group | | Company | |
|---|---|---|---|---|
| | 2008 | 2007 | 2008 | 2007 |
| | € | € | € | € |
| Opening shareholders' funds | 221,186 | - | 325,991 | - |
| Loss for the year | (261,381) | (197,814) | (133,941) | (93,009) |
| Net proceeds of equity share issue | 471,500 | 419,000 | 471,500 | 419,000 |
| Closing shareholders' funds | 431,305 | 221,186 | 663,550 | 325,991 |

## 18. FINANCIAL COMMITMENTS

At 30 September 2008 the group / company had finance lease obligations, net of interest, due as follows:



| | Group | | Company | |
|---|---|---|---|---|
| Leased motor vehicles | 2008 | 2007 | 2008 | 2007 |
| | € | € | € | € |
| **Expiry date:** | | | | |
| Within one year | 15,671 | 13,642 | 10,316 | 8,976 |
| Between two and five years | 8,131 | 23,702 | 6,486 | 16,700 |
| | 23,802 | 37,344 | 16,802 | 25,676 |

The basis by which lease obligations are capitalised is stated in Note 1.

## 19. RELATED PARTY TRANSACTIONS

During the year the company had a number of transactions with its subsidiary companies Biopower Limited and Biopower Energy Savings Limited. The balances due by the subsidiary companies are disclosed in Note 11.

## 20. CAPITAL COMMITMENTS

The group had no capital commitments at the balance sheet date.

## 21. COMPARATIVES

Comparative amounts have been regrouped where necessary, on the same basis as those for the current year.

## 22. GUARANTEES

The company has issued irrevocable guarantees on behalf of the following subsidiaries for the financial year to 30 September 2008 in respect of liabilities referred to in Section 5 (C) of the Companies (Amendement) Act, 1986:-

Biopower Limited
Biopower Energy Savings Limited

## 23. SUBSIDIARY COMPANIES

The subsidiary companies included in these consolidated financial statements are as follows:-

Biopower Limited
Biopower Energy Savings Limited

**Biowpower Group Public Limited Company**

Deloitte & Touche
Chartered Accountants & Registered Auditors
No. 6 Lapp's Quay
Cork

Dear Sirs,

We confirm to the best of our knowledge and belief, and having made appropriate enquiries of other officials of the company (and where appropriate, inspection of evidence) sufficient to satisfy ourselves that we can properly make each of the following representations given to you in connection with your audit of the company's financial statements for the year ended 30 September 2008.

1. We acknowledge as directors our responsibilities under the Companies Acts 1963 to 2006 for preparing financial statements for the company which give a true and fair view and for making accurate representations to you.

2. There have been no significant transactions with the directors and officers of the company and its subsidiaries, and other related parties, other than those which are included in the notes to the financial statements.

3. That at no time during the year has the company had any arrangement, transaction or agreement to provide credit facilities (including loans, quasi-loans or credit transactions) for directors (or persons connected with them) or to guarantee or provide security for such matters (except as disclosed in the notes to the accounts).

4. We confirm that all errors known to us, or identified by you in the course of your audit and communicated to us, were adjusted.

5. **Books & Records**
To the best of our knowledge and belief all transactions undertaken by the company have been properly recorded in the accounting records and these financial statements and all relevant records have been given to you.

6. **Profit and Loss Account**
Except as disclosed in the financial statements, the results for the year were not materially affected by:

   (a) transactions of a sort not usually undertaken by the company,
   (b) circumstances of an exceptional or non-recurrent nature,
   (c) charges or credits relating to prior periods or
   (d) any change in the basis of accounting.

   Any expenditure included in the financial statements (where receipts or vouchers were not available) was properly made in connection with the carrying on of the company's business, unless specifically notified to you as being of a private nature.

7. **Fixed Assets**
   (a) The company has a satisfactory title to all fixed assets included in the financial statements.

   (b) The fixed assets to which the company has satisfactory title are included in the financial statements.

   (c) All amounts of expenditure capitalised in respect of fixed assets as detailed in the financial statements represent expenditure incurred in acquiring additional assets or improving existing assets. No expenditure capitalised is of a revenue nature.

*(continued on next page)*

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**8. Bank & Cash**

The balances disclosed in the financial statements for bank and cash balances held at year end reflects all bank accounts and cash balances held by the company at year-end. We confirm that the company has legal title to these amounts as stated in the financial statements.

We confirm that no bank accounts except as disclosed in the financial statements have been opened in the name of the company.

**9. Debtors**

Balances included in the financial statements are all valid debtors or prepayments. The bad debts written off are complete as far as the directors are aware and full provision has been against specific debts which are known or may be expected to be irrecoverable.

**10. Liabilities**

All known liabilities of material amount at 30 September 2008 are shown in the financial statements including the liability for all purchases to which title has passed prior to 30 September 2008 .

**11. Capital Commitments**

At 30 September 2008 there were no commitments for capital expenditure.

**12. Contingent Liabilities**

No contingent liabilities existed at 30 September 2008.

**13. Post Balance Sheet Events**

No events have occurred between 30 September 2008 and the date of this letter which could materially affect the financial statements.



**14. Going Concern**

We have prepared the accounts on a going concern basis. We are satisfied that the company has adequate resources to ensure it can continue to trade for a period of twelve months from the date of approval of these financial statements.

The directors confirm their willingness to financially support the company for the foreseeable future.

We confirm that the above representations are made on the basis of adequate enquiries of management and staff (and where appropriate, inspection of evidence) sufficient to satisfy ourselves that we can properly make each of the above representations to you.

Yours faithfully,

)
)
) **DIRECTORS**
)
)

# BIOPOWER GROUP PUBLIC LIMITED COMPANY

# REPORTS AND FINANCIAL STATEMENTS

# FOR THE YEAR ENDED 30 SEPTEMBER 2008

# BIOPOWER GROUP PUBLIC LIMITED COMPANY

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## BIOPOWER GROUP PUBLIC LIMITED COMPANY

## DIRECTORS AND OTHER INFORMATION

| | |
|---|---|
| **DIRECTORS** | Donall O'Laoire<br>Michael Holland<br>Timothy Clarke<br>Michael Griffin<br>Dr. Colin J. Campbell<br>Dr. Bernard Rice<br>Walter Ryan-Purcell |
| **COMPANY SECRETARY** | Walter Ryan-Purcell |
| **COMPANY NUMBER** | 437014 |
| **REGISTERED OFFICE** | 48 Main Street<br>Schull<br>Co. Cork |
| **AUDITORS** | Deloitte & Touche<br>Chartered Accountants & Registered Auditors<br>No. 6 Lapp's Quay<br>Cork |
| **BUSINESS ADDRESS** | 48 Main Street<br>Schull<br>Co Cork |
| **BANKERS** | AIB Bank<br>Ballincollig<br>Co. Cork |
| **SOLICITORS** | Ronan Daly Jermyn<br>12 South Mall<br>Cork |

## DIRECTORS' REPORT

The directors present their report together with the audited financial statements for the year ended 30 September 2008.

### PRINCIPAL ACTIVITY AND REVIEW OF THE BUSINESS

The principal activity of the company is a Bio Energy investment company to build and acquire operating subsidiaries in the Bio Energy sector. The company owns 100% of Biopower Limited which is in the process of identifying sites for bio-parks and plans to open its first park in 2010.

### FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The directors have considered financial risk management issues and are satisfied with the policies that are in place to address these issues.

### FUTURE DEVELOPMENTS

The directors do not foresee any significant change to the company's operations in the short to medium term.

| RESULTS FOR THE YEAR | Year ended 30/09/08 | 4 months ended 30/09/07 |
|---|---|---|
| | € | € |
| Loss for the financial year amounted to | (133,941) | (93,009) |

The directors do not recommend the payment of a final dividend in respect of the year ended 30 September 2008.



### POST BALANCE SHEET EVENTS

There have been no significant events affecting the company since the year end. The company is currently engaged in a share issue to generate sufficient funds to finance its investing activity and working capital requirements and to meet its liabilities as they fall due for a period of not less than 12 months from the date of approval of the financial statements.

### DIRECTORS

The present membership of the Board is set out on page 2. On 14 December 2007 Donall O' Laoire resigned as secretary and Walter Ryan-Purcell was appointed as secretary and director of the company. On 11 February 2008 Stephen O' Keeffe and Kevin Donovan were appointed as directors to the company. Kevin Donovan resigned on 28 November 2008 and Stephen O'Keeffe resigned on 20 January 2009. All other directors served throughout the year.

### BOOKS AND RECORDS

To ensure that proper books and accounting records are kept in accordance with Section 202 of the Companies Act, 1990, the directors have employed appropriately qualified accounting personnel and have maintained appropriate computerised accounting systems. The books of account are located at the company's registered office.

## DIRECTORS' AND SECRETARY'S INTERESTS IN SHARES

The directors' and secretary of the company who held office at 30 September 2008 had the following interests in the shares of the company:

| Director | Type of shareholding | No. of shares held 30/09/08 | No. of shares held 30/09/07 |
|---|---|---|---|
| Donall O'Laoire | Ordinary Shares €0.01 each | 850,000 | 850,000 |
| Michael Holland | Ordinary Shares €0.01 each | 100,000 | 100,000 |
| Timothy Clarke | Ordinary Shares €0.01 each | 150,000 | 150,000 |
| Michael Griffin | Ordinary Shares €0.01 each | 100,000 | 100,000 |
| Dr. Colin J. Campbell | Ordinary Shares €0.01 each | 150,000 | 150,000 |
| Walter Ryan-Purcell | Ordinary shares €0.01 each | 2,000,000 | - |



## AUDITORS

The auditors, Deloitte & Touche, Chartered Accountants & Registered Auditors, have expressed their willingness to continue in office in accordance with the provisions of Section 160(2) of the Companies Act, 1963.

On behalf of the Board

) Walter Ryan-Purcell
)
) DIRECTORS
)
) D O'Laoire

Date: 11 August 2009

## BIOPOWER GROUP PUBLIC LIMITED COMPANY

## STATEMENT OF DIRECTORS' RESPONSIBILITIES

---

Irish company law requires the directors to prepare financial statements for each financial year which give a true and fair view of the state of the affairs of the company and of the profit or loss of the company for that period. In preparing those financial statements, the directors are required to:

- select suitable accounting policies and apply them consistently;

- make judgements and estimates that are reasonable and prudent; and

- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors are responsible for keeping proper books of account which disclose with reasonable accuracy at any time the financial position of the company and to enable them to ensure that the financial statements are prepared in accordance with accounting standards generally accepted in Ireland and comply with Irish statute comprising the Companies Acts 1963 to 2009 and the European Communities (Companies: Group Accounts) Regulations, 1992. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Deloitte

Deloitte & Touche
Chartered Accountants &
Registered Auditors

# INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOPOWER GROUP PUBLIC LIMITED COMPANY

We have audited the financial statements of Biopower Group Public Limited Company for the year ended 30 September 2008 which comprise the Profit and Loss Account, the Balance Sheet and the related notes (1 to 18). These financial statements have been prepared under the accounting policies set out therein.

This report is made solely to the company's members, as a body, in accordance with Section 193 of the Companies Act 1990. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members, as a body, for our audit work, for this report, or for the opinions we have formed.



**Respective responsibilities of directors and auditors**

The directors are responsible for preparing the financial statements, as set out in the Statement of Directors' Responsibilities in accordance with applicable law and accounting standards issued by the Accounting Standards Board and published by the Institute of Chartered Accountants in Ireland (Generally Accepted Accounting Practice in Ireland).

Our responsibility, as independent auditors, is to audit the financial statements in accordance with relevant legal and regulatory requirements and International Standards on Auditing (UK and Ireland).

We report to you our opinion as to whether the financial statements give a true and fair view in accordance with Generally Accepted Accounting Practice in Ireland, and are properly prepared in accordance with Irish statute comprising the Companies Acts 1963 to 2009 and the European Communities (Companies: Group Accounts) Regulations, 1992. We also report to you whether, in our opinion, proper books of account have been kept by the company; whether, at the balance sheet date, there exists a financial situation requiring the convening of an extraordinary general meeting of the company; and whether the information given in the Directors' Report is consistent with the financial statements. In addition, we state whether we have obtained all information and explanations necessary for the purposes of our audit and whether the company's balance sheet and profit and loss account are in agreement with the books of account.

We also report to you if, in our opinion, any information specified by law regarding directors' remuneration and directors' transactions is not disclosed and, where practicable, include such information in our report.

We read the Directors' Report and we consider the implications for our report if we become aware of any apparent mis-statement within it. Our responsibilities do not extend to other information.

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## INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOPOWER GROUP PUBLIC LIMITED COMPANY

**Basis of audit opinion**

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the directors in the preparation of the financial statements and whether the accounting policies are appropriate to the company's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material mis-statement, whether caused by fraud or other irregularity or error. In forming our opinion we evaluated the overall adequacy of the presentation of information in the financial statements.



**Opinion**

In our opinion the financial statements:

* give a true and fair view, in accordance with Generally Accepted Accounting Practice in Ireland of the state of the affairs of the company as at 30 September 2008 and of the loss for the year then ended; and
* have been properly prepared in accordance with the Companies Acts 1963 to 2009 and the European Communities (Companies: Group Accounts) Regulations, 1992.

*Emphasis of Matter- Going Concern*

Without qualifying our opinion, we draw your attention to Note 2 to the financial statements which indicates that the company incurred a loss during the year of €133,941. This condition indicates the existence of a material uncertainty which may cast significant doubt about the company's ability to continue as a going concern. The company is currently dependent on raising funds and the directors are confident that the share issue currently in progress will succeed and will generate sufficient funds to finance the company's investing activity and working capital requirements and to meet its liabilities as they fall due for a period of at least twelve months from the date of approval of the financial statements. The directors have prepared the financial statements of the company on the basis that the company is a going concern. The financial statements do not include the adjustments that would result if the company was unable to continue as a going concern.

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## INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOPOWER GROUP PUBLIC LIMITED COMPANY

We have obtained all the information and explanations we considered necessary for the purposes of our audit. In our opinion proper books of account have been kept by the company. The company's balance sheet and its profit and loss account are in agreement with the books of account.

In our opinion, the information given in the Directors' Report is consistent with the financial statements.

The net assets of the company, as stated in the balance sheet are more than half the amount of its called-up share capital and, in our opinion, on that basis there did not exist at 30 September 2008, a financial situation which under Section 40(1) of the Companies (Amendment) Act 1983 would require the convening of an extraordinary general meeting of the company.

Deloitte & Touche
Cork

Date: 11 August 2009

BIOPOWER GROUP PUBLIC LIMITED COMPANY

PROFIT AND LOSS ACCOUNT
FOR THE YEAR ENDED 30 SEPTEMBER 2008

| | Notes | Year Ended 30/09/08 € | 4 Months Ended 30/09/07 € |
|---|---|---|---|
| **Turnover - continuing operations** | 3 | 13,459 | - |
| Administrative expenses | | (144,791) | (91,776) |
| **OPERATING LOSS -continuing operations** | | (131,332) | (91,776) |
| Interest payable and similar charges | 5 | (2,609) | (1,233) |
| **LOSS ON ORDINARY ACTIVITIES BEFORE TAXATION** | 6 | (133,941) | (93,009) |
| Taxation on loss on ordinary activities | 7 | - | - |
| **LOSS ON ORDINARY ACTIVITIES AFTER TAXATION** | | (133,941) | (93,009) |



There are no recognised gains or losses other than the loss for the financial year as disclosed in the profit and loss account.

The financial statements were approved by the Board of Directors on 11 August 2009 and signed on its behalf by

) DIRECTORS

## BIOPOWER GROUP PUBLIC LIMITED COMPANY

### BALANCE SHEET
### AS AT 30 SEPTEMBER 2008

| | Notes | 2008 € | 2007 € |
|---|---|---|---|
| **FIXED ASSETS** | | | |
| Tangible assets | 8 | 130,751 | 134,363 |
| Financial assets | 9 | 1,002 | 1,000 |
| | | 131,753 | 135,363 |
| **CURRENT ASSETS** | | | |
| Debtors | 10 | 515,359 | 106,523 |
| Cash at bank and in hand | | 42,106 | 139,625 |
| | | 557,465 | 246,148 |
| **CREDITORS (Amounts falling due within one year)** | 11 | (19,182) | (38,820) |
| **NET CURRENT ASSETS** | | 538,283 | 207,328 |
| **TOTAL ASSETS LESS CURRENT LIABILITIES** | | 670,036 | 342,691 |
| **CREDITORS (Amounts falling due after more than one year)** | 12 | (6,486) | (16,700) |
| **NET ASSETS** | | 663,550 | 325,991 |
| **CAPITAL AND RESERVES** | | | |
| Called up share capital | 13 | 64,190 | 54,760 |
| Share premium account | 14 | 826,310 | 364,240 |
| Profit and loss account | 15 | (226,950) | (93,009) |
| **SHAREHOLDERS' FUNDS** | 16 | 663,550 | 325,991 |



The financial statements were approved by the Board of Directors on 11 August 2009 and signed on its behalf by

) DIRECTORS )

## 1. STATEMENT OF ACCOUNTING POLICIES

The significant accounting policies adopted by the company are as follows:

### BASIS OF PREPARATION

The financial statements have been prepared in accordance with accounting standards generally accepted in Ireland and Irish statute comprising the Companies Acts, 1963 to 2009 and the European Communities (Companies: Group Accounts) Regulations, 1992.

### ACCOUNTING CONVENTION

The financial statements have been prepared under the historical cost convention.

### TURNOVER

Turnover represents the invoiced amount of services provided, net of value added tax.

### TANGIBLE FIXED ASSETS AND DEPRECIATION

Land is stated at cost, provision is made for depreciation on all other tangible assets, at rates calculated to write off the cost of each asset over its expected useful life, as follows:

| | |
|---|---|
| Plant and office equipment | 10% Straight line basis |
| Leased motor vehicles | 20% Straight line basis |



### LEASING AND HIRE PURCHASE COMMITMENTS

Assets obtained under hire purchase contracts and finance leases are capitalised as tangible assets and depreciated over the shorter of the lease term and their useful lives. Obligations under such agreements are included in creditors net of the finance charge allocated to future periods.

Rentals in respect of all other leases are charged to the profit and loss account as incurred.

### FINANCIAL ASSETS

The value of the investments in subsidiaries is valued at the lower of cost and their estimated net realisable value. Where the directors are of the opinion that there has been a diminution in the value of financial assets, then the decrease in value is written off to the profit and loss account.

### RESEARCH AND DEVELOPMENT

Research expenditure is written off to the profit and loss account in the year in which it is incurred.

### CASH FLOW STATEMENT

The company meets the size criteria for a small company set by the Companies (Amendment) Act, 1986 and therefore, in accordance with FRS 1: Cash Flow Statements, it has not prepared a cash flow statement.

## 2 GOING CONCERN AND BASIS OF PREPARING THE FINANCIAL STATEMENTS

The company incurred a loss during the year of 133,941 and has accumulated losses since commencement of €226,950. The company is engaged in investing in the bio energy industry and the initial period is anticipated to extend for a period of years, before the company achieves profitability.

The company is currently dependent on fundraising activity and the directors are confident that the fundraising activity currently in progress will be successful and will generate sufficient funds to finance the company's investing activity and working capital requirements and to meet its liabilities as they fall due for a period of not less than twelve months from the date of approval of the financial statements.

The financial statements do not include any adjustments to the carrying amount and classification of assets and liabilities that would arise if the company was unable to continue as a going concern.



## 3. TURNOVER

The total turnover of the company for the year has been derived from its principal activity wholly undertaken in Ireland.

## 4. EMPLOYEES AND REMUNERATION

**Number of employees**

The average number of persons employed by the company during the year was:

| | Year Ended 30/09/08 Number | 4 Months Ended 30/09/07 Number |
|---|---|---|
| Management and administration | 4 | 3 |

| **The staff costs are comprised of :-** | Year Ended 30/09/08 € | 4 Months Ended 30/09/07 € |
|---|---|---|
| Wages and salaries | 104,941 | 5,065 |
| Social welfare costs | 11,003 | 490 |
| | 115,944 | 5,555 |

The directors did not receive any remuneration during the year.



## 5. INTEREST PAYABLE AND SIMILAR CHARGES

| | Year Ended 30/09/08 € | 4 Months Ended 30/09/07 € |
|---|---|---|
| Lease finance charges | 2,609 | 1,233 |

## 6. LOSS ON ORDINARY ACTIVITIES BEFORE TAXATION

| | Year Ended 30/09/08 € | 4 Months Ended 30/09/07 € |
|---|---|---|
| Loss on ordinary activities before taxation is stated after charging: | | |
| Depreciation of tangible assets | 6,468 | 6,180 |
| Auditors' remuneration | 1,200 | 1,000 |

## 7. TAXATION ON LOSS ON ORDINARY ACTIVITIES

No charge to taxation arises due to losses incurred.

## 8. TANGIBLE ASSETS

| | Land | Plant & office equipment | Leased motor vehicles | Total |
|---|---|---|---|---|
| | € | € | € | € |
| **Cost** | | | | |
| At 1 October 2007 | 107,945 | 3,398 | 29,200 | 140,543 |
| Additions | - | 2,856 | - | 2,856 |
| At 30 September 2008 | 107,945 | 6,254 | 29,200 | 143,399 |
| **Depreciation** | | | | |
| At 1 October 2007 | - | 340 | 5,840 | 6,180 |
| Charge for the year | - | 628 | 5,840 | 6,468 |
| At 30 September 2008 | - | 968 | 11,680 | 12,648 |
| **Net book values** | | | | |
| At 30 September 2008 | 107,945 | 5,286 | 17,520 | 130,751 |
| At 30 September 2007 | 107,945 | 3,058 | 23,360 | 134,363 |



The basis by which depreciation is calculated is stated in Note 1.

## 9. FINANCIAL ASSETS

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| Opening shares at cost | 1,000 | 1,000 |
| Share additions at cost | 2 | - |
| | 1,002 | 1,000 |

The company owns 100% of the share capital of Biopower Limited and Biopower Energy Savings Limited, whose registered offices are 48 Main Street, Schull, Co. Cork, Ireland. The principal activity of the companies, is developing the infrastructure and technologies for BioEnergy production and related services. The investment comprises of 1,000 ordinary shares of €1 each in Biopower Limited and 2 ordinary shares of €1 each in Biopower Energy Saving Limited.

## 10. DEBTORS

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| **Amounts falling due within one year:-** | | |
| Amounts owed by subsidiary company - Biopower Limited | 442,348 | 102,959 |
| Amounts owed by subsidiary company - Biopower Energy Savings Limited | 59,305 | - |
| VAT recoverable | 13,706 | 3,564 |
| | 515,359 | 106,523 |

## 11. CREDITORS (Amounts falling due within one year)

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| Net obligations under finance leases (Note 17) | 10,316 | 8,976 |
| Other taxes and social security costs | 2,189 | 836 |
| Accruals | 6,677 | 29,008 |
| | 19,182 | 38,820 |



**Other taxes and social security costs**

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| PAYE/PRSI payable | 2,189 | 836 |
| Total taxes and social security costs | 2,189 | 836 |

## 12. CREDITORS (Amounts falling due after more than one year)

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| Net obligations under finance leases (Note 17) | 6,486 | 16,700 |

## 13. CALLED UP SHARE CAPITAL

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| **Authorised :** | | |
| 10,000,000 ordinary shares of €0.01 each | 100,000 | 100,000 |
| **Allotted, called up and fully paid equity :** | | |
| 6,419,000 ordinary shares of €0.01 each | 64,190 | 54,760 |

During the period, the company alloted 943,000 ordinary shares with a nominal value of €9,430 and at a premium of €462,070.



## 14. SHARE PREMIUM ACCOUNT

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| At 1 October 2007 | 364,240 | - |
| Share premium increase | 462,070 | 364,240 |
| At 30 September 2008 | 826,310 | 364,240 |

## 15. PROFIT AND LOSS ACCOUNT

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| Profit and loss account brought forward | (93,009) | - |
| Loss for the year/period | (133,941) | (93,009) |
| Profit and loss account carried forward | (226,950) | (93,009) |

## 16. RECONCILIATION OF MOVEMENTS IN SHAREHOLDERS' - FUNDS

| | 2008 | 2007 |
|---|---|---|
| | € | € |
| Opening shareholders' funds | 325,991 | - |
| Loss for the year | (133,941) | (93,009) |
| Net proceeds of equity share issue | 471,500 | 419,000 |
| Closing shareholders' funds | 663,550 | 325,991 |

## 17. FINANCIAL COMMITMENTS

At 30 September 2008 the company had finance lease obligations, net of interest, due as follows:

| Leased motor vehicles | 2008 | 2007 |
|---|---|---|
| | € | € |
| **Expiry date:** | | |
| Within one year | 10,316 | 8,976 |
| Between two and five years | 6,486 | 16,700 |
| | 16,802 | 25,676 |

The basis by which lease obligations are capitalised is stated in Note 1.



## 18. RELATED PARTY TRANSACTIONS

During the year the company had a number of transactions with its subsidiary companies Biopower Limited and Biopower Energy Savings Limited. The balances due by the subsidiary companies are disclosed in Note 10.

# BIOPOWER GROUP PUBLIC LIMITED COMPANY

## ADDITIONAL INFORMATION NOT COVERED BY THE AUDITORS' REPORT

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BIOPOWER GROUP PUBLIC LIMITED COMPANY

SCHEDULES TO THE PROFIT AND LOSS ACCOUNT
FOR THE YEAR ENDED 30 SEPTEMBER 2008

| | Year Ended 2008 € | 4 Months Ended 2007 € |
|---|---|---|
| **ADMINISTRATIVE EXPENSES** | | |
| Wages and salaries | 104,941 | 5,065 |
| Employer's PRSI contributions | 11,003 | 490 |
| Staff training and recruitment costs | 420 | 3,213 |
| Management expenses recharged | (52,806) | - |
| Rent & rates | 4,137 | 5,026 |
| Insurance | 3,537 | 261 |
| Light and heat | 322 | - |
| Laundry | 497 | - |
| Printing and stationery | 16,204 | 1,644 |
| Advertising and promotion costs | 1,321 | 1,005 |
| Telephone and postage | 6,911 | 3,240 |
| Computer costs | 7,439 | 312 |
| Motor, travel & conference expenses | 17,379 | 1,885 |
| Design, development & research costs | - | 1,650 |
| Legal and professional | 1,884 | 29,487 |
| Consultancy fees | 3,997 | 26,698 |
| Audit and accountancy fees | 7,698 | 3,500 |
| Bank charges | 711 | 272 |
| Sundry | 2,250 | 200 |
| Subscriptions and donations | 478 | 1,648 |
| Depreciation | 6,468 | 6,180 |
| | 144,791 | 91,776 |

**Biopower Group Public Limited Company**

Deloitte & Touche
Chartered Accountants & Registered Auditors
No. 6 Lapp's Quay
Cork

Dear Sirs,

We confirm to the best of our knowledge and belief, and having made appropriate enquiries of other officials of the company (and where appropriate, inspection of evidence) sufficient to satisfy ourselves that we can properly make each of the following representations given to you in connection with your audit of the company's financial statements for the year ended 30 September 2008.

1. We acknowledge as directors our responsibilities under the Companies Acts 1963 to 2006 for preparing financial statements for the company which give a true and fair view and for making accurate representations to you.
2. There have been no significant transactions with the directors and officers of the company and its subsidiaries, and other related parties, other than those which are included in the notes to the financial statements.

3. That at no time during the year has the company had any arrangement, transaction or agreement to provide credit facilities (including loans, quasi-loans or credit transactions) for directors (or persons connected with them) or to guarantee or provide security for such matters (except as disclosed in the notes to the accounts).

4. We confirm that all errors known to us, or identified by you in the course of your audit and communicated to us, were adjusted.

5. **Books & Records**
To the best of our knowledge and belief all transactions undertaken by the company have been properly recorded in the accounting records and these financial statements and all relevant records have been given to you.



6. **Profit and Loss Account**
Except as disclosed in the financial statements, the results for the year were not materially affected by:

(a) transactions of a sort not usually undertaken by the company,
(b) circumstances of an exceptional or non-recurrent nature,
(c) charges or credits relating to prior periods or
(d) any change in the basis of accounting.

Any expenditure included in the financial statements (where receipts or vouchers were not available) was properly made in connection with the carrying on of the company's business, unless specifically notified to you as being of a private nature.

7. **Fixed Assets**
(a) The company has a satisfactory title to all fixed assets included in the financial statements.

(b) The fixed assets to which the company has satisfactory title are included in the financial statements.

(c) All amounts of expenditure capitalised in respect of fixed assets as detailed in the financial statements represent expenditure incurred in acquiring additional assets or improving existing assets. No expenditure capitalised is of a revenue nature.

*(continued on next page)*

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**8. Bank & Cash**

The balances disclosed in the financial statements for bank and cash balances held at year end reflects all bank accounts and cash balances held by the company at year-end. We confirm that the company has legal title to these amounts as stated in the financial statements.

We confirm that no bank accounts except as disclosed in the financial statements have been opened in the name of the company.

**9. Debtors**

Balances included in the financial statements are all valid debtors or prepayments. The bad debts written off are complete as far as the directors are aware and full provision has been against specific debts which are known or may be expected to be irrecoverable.

**10. Liabilities**

All known liabilities of material amount at 30 September 2008 are shown in the financial statements including the liability for all purchases to which title has passed prior to 30 September 2008.

**11. Capital Commitments**

At 30 September 2008 there were no commitments for capital expenditure.

**12. Contingent Liabilities**

No contingent liabilities existed at 30 September 2008.

**13. Post Balance Sheet Events**

No events have occurred between 30 September 2008 and the date of this letter which could materially affect the financial statements.

**14. Going Concern**

We have prepared the accounts on a going concern basis. We are satisfied that the company has adequate resources to ensure it can continue to trade for a period of twelve months from the date of approval of these financial statements.

We confirm that the above representations are made on the basis of adequate enquiries of management and staff (and where appropriate,inspection of evidence) sufficient to satisfy ourselves that we can properly make each of the above representations to you.

Yours faithfully,

) **DIRECTORS**

# BIOPOWER ENERGY SAVINGS LIMITED

## REPORTS AND FINANCIAL STATEMENTS

## FROM THE DATE OF INCORPARATION TO 30 SEPTEMBER 2008

# BIOPOWER ENERGY SAVINGS LIMITED

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## BIOPOWER ENERGY SAVINGS LIMITED

## DIRECTORS AND OTHER INFORMATION

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| | |
|---|---|
| **DIRECTORS** | Walter Ryan-Purcell<br>Donall O'Laoire<br>William Daunt |
| **COMPANY SECRETARY** | Walter Ryan-Purcell |
| **COMPANY NUMBER** | 448754 |
| **REGISTERED OFFICE** | 48 Main Street<br>Schull<br>Co. Cork |
| **AUDITORS** | Deloitte & Touche<br>Chartered Accountants & Registered Auditors<br>No. 6 Lapp's Quay<br>Cork |
| **BUSINESS ADDRESS** | 48 Main Street<br>Schull<br>Co Cork |
| **BANKERS** | AIB Bank<br>Ballincollig<br>Co.Cork |
| **SOLICITORS** | Ronan Daly Jermyn<br>12 South Mall<br>Cork |

## DIRECTORS' REPORT

The directors present their annual report together with the audited financial statements from the date of incorporation, 8 November 2007 to 30 September 2008.

### PRINCIPAL ACTIVITY AND REVIEW OF THE BUSINESS

The principal activity of the company is to provide services of blower door testing, thermal energy testing, BER ratings and energy consultation.

### FINANCING AND STRUCTURE

The company is currently funded by a commitment of continued financial support from the parent company Biopower Group Public Limited Company that will enable the company to continue to trade for the foreseeable future. For further details refer to Note 2 to the financial statements.

### FUTURE DEVELOPMENTS

The directors do not foresee any significant change to the company's operations in the short to medium term.

### RESULTS AND DIVIDENDS FOR THE PERIOD

| | 11 months ended 30/09/08 |
|---|---|
| | € |
| Loss for the financial period amounted to | (59,571) |

The directors do not recommend the payment of a final dividend in respect of the period ended 30 September 2008.



### POST BALANCE SHEET EVENTS

There have been no significant events affecting the company since the period end.

### DIRECTORS

The present membership of the Board is set out on page 2. On 8 November 2007, Donall O' Laoire was appointed as director and secretary of the company. On the same date William Daunt was appointed as director of the company. On 4 December 2007, Donall O' Laoire resigned as secretary and Walter Ryan-Purcell was appointed as secretary and director of the company. All directors served throughout their respective periods.

### BOOKS AND RECORDS

To ensure that proper books and accounting records are kept inaccordance with Section 202 of the Companies Act, 1990, the directors have employed appropriately qualified accounting personnel and have maintained appropriate computerised accounting systems. The books of account are located at the company's registered office.

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## DIRECTORS' AND SECRETARY'S INTERESTS IN SHARES

The directors and secretary of the company who held office at 30 September 2008 did not have any interests in the shares of the company.

The directors and secretary had interests in the shares of Biopower Group Public Limited Company, the parent company as follows:

| Director | Type of shareholding | No. of shares held 30/09/08 |
|---|---|---|
| Walter Ryan-Purcell (Director and Secretary) | Ordinary Shares €0.01 each | 2,000,000 |
| Donall O'Laoire | Ordinary Shares €0.01 each | 850,000 |
| William Daunt | Ordinary Shares €0.01 each | 175,000 |



## AUDITORS

The auditors, Deloitte & Touche, Chartered Accountants & Registered Auditors, having been appointed during the period have expressed their willingness to continue in office in accordance with the provisions of Section 160(2) of the Companies Act, 1963.

On behalf of the Board

) Walter Ryan-Purcell
) DIRECTORS
) Donall O'Laoire

Date: 11 August 2009

## BIOPOWER ENERGY SAVINGS LIMITED

## STATEMENT OF DIRECTORS' RESPONSIBILITIES

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Irish company law requires the directors to prepare financial statements for each financial period which give a true and fair view of the state of the affairs of the company and of the profit or loss of the company for that period. In preparing those financial statements, the directors are required to:

- select suitable accounting policies and apply them consistently;

- make judgements and estimates that are reasonable and prudent; and

- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors are responsible for keeping proper books of account which disclose with reasonable accuracy at any time the financial position of the company and to enable them to ensure that the financial statements are prepared in accordance with accounting standards generally accepted in Ireland and comply with Irish statute comprising the Companies Acts 1963 to 2009. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Deloitte

Deloitte & Touche
Chartered Accountants &
Registered Auditors

# INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOPOWER ENERGY SAVINGS LIMITED

We have audited the financial statements of Biopower Energy Savings Limited for the period from incorporation to 30 September 2008 which comprise the Profit and Loss Account, the Balance Sheet and the related notes (1 to 14). These financial statements have been prepared under the accounting policies set out therein.

This report is made solely to the company's members, as a body, in accordance with Section 193 of the Companies Act 1990. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members, as a body, for our audit work, for this report, or for the opinions we have formed.



**Respective responsibilities of directors and auditors**

The directors are responsible for preparing the financial statements as set out in the Statement of Directors' Responsibilities in accordance with applicable law and accounting standards issued by the Accounting Standards Board and published by the Institute of Chartered Accountants in Ireland (Generally Accepted Accounting Practice in Ireland).

Our responsibility, as independent auditors, is to audit the financial statements in accordance with relevant legal and regulatory requirements and International Standards on Auditing (UK and Ireland).

We report to you our opinion as to whether the financial statements give a true and fair view in accordance with Generally Accepted Accounting Practice in Ireland, and are properly prepared in accordance with Irish statute comprising the Companies Acts 1963 to 2009. We also report to you whether, in our opinion, proper books of account have been kept by the company; whether, at the balance sheet date, there exists a financial situation requiring the convening of an extraordinary general meeting of the company; and whether the information given in the Directors' Report is consistent with the financial statements. In addition, we state whether we have obtained all information and explanations necessary for the purposes of our audit and whether the company's balance sheet and profit and loss account are in agreement with the books of account.

We also report to you if, in our opinion, any information specified by law regarding directors' remuneration and directors' transactions is not disclosed and, where practicable, include such information in our report.

We read the Directors' Report and we consider the implications for our report if we become aware of any apparent mis-statement within it. Our responsibilities do not extend to other information.

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## INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOPOWER ENERGY SAVINGS LIMITED

**Basis of audit opinion**

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the directors in the preparation of the financial statements and whether the accounting policies are appropriate to the company's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material mis-statement, whether caused by fraud or other irregularity or error. In forming our opinion we evaluated the overall adequacy of the presentation of information in the financial statements.



**Opinion**

In our opinion the financial statements:

* give a true and fair view, in accordance with Generally Accepted Accounting Practice in Ireland of the state of the affairs of the company as at 30 September 2008 and of the loss for the period then ended; and
* have been properly prepared in accordance with the Companies Acts 1963 to 2009.

*Emphasis of Matter- Going Concern*

Without qualifying our opinion, we draw your attention to Note 2 in the financial statements which indicates that the company has incurred losses during the year and has net liabilities of €59,569 at the year end. These conditions indicate the existence of a material uncertainty which may cast significant doubt about the company's ability to continue as a going concern. The company is dependent on and has obtained written confirmation of continued support from the company's parent company, Biopower Group Public Limited Company for a period of not less than 12 months from the date of approval of the financial statements. The report of the auditors on the financial statements of the parent company for the period ended 30 September 2008 draws attention to the existence of a material uncertainty which may cast significant doubt about the company's ability to continue as a going concern, which is particularly dependent on fund-raising activity including a share issue currently in progress. The directors have prepared the financial statements of the company on the basis that the company is a going concern. The financial statements do not include the adjustments that would result if the company was unable to continue as a going concern.

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## INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF BIOPOWER ENERGY SAVINGS LIMITED

We have obtained all the information and explanations we considered necessary for the purposes of our audit. In our opinion proper books of account have been kept by the company. The company's balance sheet and its profit and loss account are in agreement with the books of account.

In our opinion, the information given in the directors' report is consistent with the financial statements.

The liabilities of the company exceed the assets of the company, as stated on the balance sheet and, in our opinion, on that basis there did exist at 30th September 2008, a financial situation which under Section 40(1) of the Companies (Amendment) Act 1983 may require the convening of an extraordinary general meeting of the company.

Deloitte & Touche

Cork

Date: 11 August 2009

## BIOPOWER ENERGY SAVINGS LIMITED

## PROFIT AND LOSS ACCOUNT
## FROM THE DATE OF INCORPORATION TO 30 SEPTEMBER 2008

| | Notes | 11 months ended 30/09/08 € |
|---|---|---|
| **Turnover - continuing operations** | 3 | 5,435 |
| Administrative expenses | | (65,006) |
| **LOSS ON ORDINARY ACTIVITIES BEFORE TAXATION** | 4 | (59,571) |
| Taxation on loss on ordinary activities | 5 | - |
| **LOSS ON ORDINARY ACTIVITIES AFTER TAXATION** | | (59,571) |

There are no recognised gains or losses other than the loss for the financial period as disclosed in the profit and loss account.

The financial statements were approved by the Board of Directors on 11 August 2009 and signed on its behalf by

) DIRECTORS

## BIOPOWER ENERGY SAVINGS LIMITED

## BALANCE SHEET
## AS AT 30 SEPTEMBER 2008

| | Notes | 2008 € |
|---|---|---|
| **FIXED ASSETS** | | |
| Tangible assets | 6 | 10,837 |
| **CURRENT ASSETS** | | |
| Debtors | 7 | 784 |
| Cash at bank and in hand | | 6,434 |
| | | 7,218 |
| **CREDITORS (Amounts falling due within one year)** | 8 | (5,338) |
| **NET CURRENT ASSETS** | | 1,880 |
| **TOTAL ASSETS LESS CURRENT LIABILITIES** | | 12,717 |
| **CREDITORS (Amounts falling due after more than one year)** | 9 | (72,286) |
| **NET LIABILITIES** | | (59,569) |
| **CAPITAL AND RESERVES** | | |
| Called up share capital | 10 | 2 |
| Profit and loss account | 11 | (59,571) |
| **SHAREHOLDERS' DEFICIT** | 12 | (59,569) |



The financial statements were approved by the Board of Directors on 11 August 2009 and signed on its behalf by

) Walter Ryan-Purcell
) DIRECTORS
) William Daunt

## 1. STATEMENT OF ACCOUNTING POLICIES

The significant accounting policies adopted by the company are as follows:

### BASIS OF PREPARATION

The financial statements have been prepared in accordance with accounting standards generally accepted in Ireland and Irish statute comprising the Companies Acts, 1963 to 2009.

### ACCOUNTING CONVENTION

The financial statements have been prepared under the historical cost convention.

### TURNOVER

Turnover represents the invoiced amount of services provided, net of value added tax.

### DEPRECIATION OF TANGIBLE ASSETS

Fixed assets are stated at cost, provision is made for depreciation on all tangible assets, at rates calculated to write off the cost of each asset over its expected useful life, as follows:

| | |
|---|---|
| Plant and office equipment | 10% Straight line basis |

### CASH FLOW STATEMENT

The company meets the size criteria for a small company set by the Companies (Amendment) Act, 1986 and therefore, in accordance with FRS 1: Cash Flow Statements, it has not prepared a cash flow statement.

## 2. GOING CONCERN BASIS OF PREPARING THE FINANCIAL STATEMENTS

The company incurred a loss during the year of €59,571 and had net liabilities of €59,569 at the balance sheet date. The company is in a start up situation and projects that activity will increase significantly in the foreseeable future. During this time, the company will continue to be supported by, and has obtained written confirmation of continuing support from, Biopower Group Public Limited Company for a period of not less than 12 months from the date of approval of the financial statements.

The financial statements of the parent company indicate that the directors are confident that fund-raising activity including a share issue currently in progress will be sufficient to finance its investing activities and working capital requirements and to meet its liabilities as they fall due and for a period of not less than twelve months from the date of approval of the financial statements.

On this basis the directors consider that it is appropriate to prepare the financial statements of the company on the going concern basis, which assumes that the company will continue in operational existence for the foreseeable future. The financial statements do not include any adjustments to the carrying amount and classification of assets and liabilities that would arise if the company was unable to continue as a going concern.



## 3. TURNOVER

The total turnover of the company for the period has been derived from its principal activity wholly undertaken in Ireland.

## 4. LOSS ON ORDINARY ACTIVITIES BEFORE TAXATION

| | 11 months ended 30/09/08 |
|---|---|
| | € |
| Loss on ordinary activities before taxation is stated after charging: | |
| Depreciation of tangible assets | 1,204 |
| Auditors' remuneration | 1,200 |

## 5. TAXATION ON LOSS ON ORDINARY ACTIVITIES

No charge to taxation arises due to losses incurred.

## 6. TANGIBLE ASSETS

| | Plant & office equipment | Total |
|---|---|---|
| | € | € |
| **Cost** | | |
| Additions | 12,041 | 12,041 |
| At 30 September 2008 | 12,041 | 12,041 |
| **Depreciation** | | |
| Charge for the period | 1,204 | 1,204 |
| At 30 September 2008 | 1,204 | 1,204 |
| **Net book values** | | |
| At 30 September 2008 | 10,837 | 10,837 |

The basis by which depreciation is calculated is stated in Note 1.



## 7. DEBTORS

| | 2008 |
|---|---|
| | € |
| **Amounts falling due within one year:-** | |
| VAT recoverable | 782 |
| Other debtors and prepayments | 2 |
| | 784 |

## 8. CREDITORS (Amounts falling due within one year)

| | 2008 |
|---|---|
| | € |
| Accruals | 5,338 |

| 9. CREDITORS (Amounts falling due after more than one year) | 2008 € |
|---|---|
| Amounts due to Biopower Limited | 12,891 |
| Amount owed to Biopower Group Plc | 59,395 |
| | 72,286 |

| 10. CALLED UP SHARE CAPITAL | 2008 € |
|---|---|
| **Authorised equity :** | |
| 100,000 ordinary shares of €1.00 each | 100,000 |
| **Allotted, called up and fully paid equity :** | |
| 2 ordinary shares of €1.00 each | 2 |



| 11. PROFIT AND LOSS ACCOUNT | 2008 € |
|---|---|
| Loss for the period | (59,571) |
| Profit and loss account carried forward | (59,571) |

| 12. RECONCILIATION OF MOVEMENTS IN SHAREHOLDERS' DEFICIT | 2008 € |
|---|---|
| Loss for the period | (59,571) |
| Net proceeds of equity share issue | 2 |
| Closing shareholders' deficit | (59,569) |

## 13. GROUP MEMBERSHIP

The company is a subsidiary of Biopower Group Public Limited Company, a company incorporated in the Republic of Ireland.

## 14. RELATED PARTY TRANSACTIONS

During the year the company had a number of transactions with its parent company Biopower Group Public Limited Company and with Biopower Limited. The balances owed by the related companies are disclosed in Note 9.

# BIOPOWER ENERGY SAVINGS LIMITED

## ADDITIONAL INFORMATION NOT COVERED BY THE AUDITORS' REPORT

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## SCHEDULES TO THE PROFIT AND LOSS ACCOUNT
## FROM THE DATE OF INCORPORATION TO 30 SEPTEMBER 2008

| | 11 months ended 30/09/08 € |
|---|---|
| **ADMINISTRATIVE EXPENSES** | |
| Staff training | 3,585 |
| Printing and stationery | 34,966 |
| Advertising and promotion costs | 6,103 |
| Telephone and postage | 323 |
| Motor, travel & conference expenses | 12,242 |
| Design, development & research costs | 2,156 |
| Consultancy fees | 1,897 |
| Audit and accountancy fees | 2,500 |
| Bank charges | 30 |
| Depreciation | 1,204 |
| | 65,006 |

**Biopower Energy Savings Limited**

Deloitte & Touche
Chartered Accountants & Registered Auditors
No. 6 Lapp's Quay
Cork

Dear Sirs,

We confirm to the best of our knowledge and belief, and having made appropriate enquiries of other officials of the company (and where appropriate, inspection of evidence) sufficient to satisfy ourselves that we can properly make each of the following representations given to you in connection with your audit of the company's financial statements for the period ended 30 September 2008 .

1. We acknowledge as directors our responsibilities under the Companies Acts 1963 to 2006 for preparing financial statements for the company which give a true and fair view and for making accurate representations to you.

2. There have been no significant transactions with the directors and officers of the company and its subsidiaries, and other related parties, other than those which are included in the notes to the financial statements.

3. That at no time during the year has the company had any arrangement, transaction or agreement to provide credit facilities (including loans, quasi-loans or credit transactions) for directors (or persons connected with them) or to guarantee or provide security for such matters (except as disclosed in the notes to the accounts)

4. We confirm that all errors known to us, or identified by you in the course of your audit and communicated to us, were adjusted.

5. **Books & Records**
To the best of our knowledge and belief all transactions undertaken by the company have been properly recorded in the accounting records and these financial statements and all relevant records have been given to you.

6. **Profit and Loss Account**
Except as disclosed in the financial statements, the results for the year were not materially affected by:

   (a) transactions of a sort not usually undertaken by the company,
   (b) circumstances of an exceptional or non-recurrent nature,
   (c) charges or credits relating to prior periods or
   (d) any change in the basis of accounting.

   Any expenditure included in the financial statements (where receipts or vouchers were not available) was properly made in connection with the carrying on of the company's business, unless specifically notified to you as being of a private nature.

7. **Fixed Assets**
   (a) The company has a satisfactory title to all fixed assets included in the financial statements.

   (b) The fixed assets to which the company has satisfactory title are included in the financial statements.

   (c) All amounts of expenditure capitalised in respect of fixed assets as detailed in the financial statements represent expenditure incurred in acquiring additional assets or improving existing assets. No expenditure capitalised is of a revenue nature.

*(continued on next page)*

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**8. Bank & Cash**

The balances disclosed in the financial statements for bank and cash balances held at year end reflects all bank accounts and cash balances held by the company at year-end. We confirm that the company has legal title to these amounts as stated in the financial statements.

We confirm that no bank accounts except as disclosed in the financial statements have been opened in the name of the company.

**9. Debtors**

Balances included in the financial statements are all valid debtors or prepayments. The bad debts written off are complete as far as the directors are aware and full provision has been against specific debts which are known or may be expected to be irrecoverable.

**10. Liabilities**

All known liabilities of material amount at 30 September 2008 are shown in the financial statements including the liability for all purchases to which title has passed prior to 30 September 2008 .

**11. Capital Commitments**

At 30 September 2008 there were no commitments for capital expenditure.

**12. Contingent Liabilities**

No contingent liabilities existed at 30 September 2008.

**13. Post Balance Sheet Events**

No events have occurred between 30 September 2008 and the date of this letter which could materially affect the financial statements.



**14. Going Concern**

We have prepared the accounts on a going concern basis. The parent company has signed a letter undertaking to continue to provide whatever financial assistance is necessary to enable the company to continue to trade for a period of twelve months from the date of approval of these financial statements.

The directors confirm their willingness to financially support the company for the foreseeable future.

We confirm that the above representations are made on the basis of adequate enquiries of management and staff (and where appropriate, inspection of evidence) sufficient to satisfy ourselves that we can properly make each of the above representations to you.

Yours faithfully,

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) **DIRECTORS**
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