



Licensing Administration
Office of Climate, Licensing & Resource Use
Environmental Protection Agency
PO Box 3000
Johnstown Castle Estate
County Wexford

16 April 2011

Re: Waste Licence Application Register Number W0274-01

Dear Sir / Madam

We wish to advise of a name change in relation to the above application from ADPower Roscommon Limited to Biocore Environmental AD1 Ltd. The application has been updated to reflect the change in name. The following sections have been updated and are enclosed with this letter:

- EPA Waste Application Form – Section B – General
- EPA Waste Application Form – Section M – Declaration
- Attachment A – Non-Technical Summary
- Attachment B – General
- Attachment C – Management of the Installation
- Attachment L – Statutory Requirements

Also enclosed is a data stick with an electronic version of these updates. We look forward to confirmation that all is in order.

Yours sincerely

A handwritten signature in black ink, appearing to read "Evan Dolan".

Evan Dolan
Director
Biocore Environmental AD1 Ltd

SECTION B GENERAL

B.1 Applicant's Details**Name*:** Biocore Environmental AD1 Limited**Address:** Clarity House

Belgard Road

Tallaght

Dublin 24

Tel: 01 - 4046003**Fax:** n/a**e-mail:** info@biocore.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:** Biocore Environmental Limited

Clarity House

Belgard Road

Tallaght, Dublin 24

Tel: 01 - 4046003**Fax:** n/a**e-mail:** tdineen@biocore.net

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

Belgard Road

Tallaght

Dublin 24

Tel: 01 - 4046003**Fax:** n/a**e-mail:** info@biocore.net

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

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

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

Landowner	<input type="checkbox"/>
Lessee	<input checked="" type="checkbox"/>
Prospective Purchaser	<input type="checkbox"/>
Other (please specify)	

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

Name: 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

Castlerea

Co. Roscommon

Tel:

Fax:

e-mail:

*Current at the time the application is submitted

B.2 Location of Activity

Name: Biocore Environmental AD1 Limited

Address*: Ballinphuill

Tibohine

Castlerea

Co. Roscommon

Tel: 01 - 4046003

Fax:

e-mail: info@biocore.net

* Include any townland

National Grid Reference (8 digit 4E,4N)	1666E, 2935N
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Location maps ($\leq A3$), appropriately scaled, with legible grid references should be enclosed in **Attachment B.2**. The site boundary must be outlined on the map in colour.

B.3 Planning Authority

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

Name: Roscommon County Council

Address: The Courthouse

Roscommon

Co. Roscommon

Tel: 0906 637100

Fax: n/a

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 <input checked="" type="checkbox"/>
	No <input type="checkbox"/>

Planning Permission relating to this application:-

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

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Local Authority Planning File Reference N^o:	08/656
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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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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The applicant should indicate the **Health Board Region** where the activity is or will be located.

Name: Western Health Board _____
Address: Environmental Health Centre _____
Ballaghaderreen _____
Co. Roscommon _____
Tel: 094 9860639 _____
Fax: 094 9860450 _____

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B.6 Notices and Advertisements

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

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

B.7 Type of Waste Activity, Tonnages & Fees

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

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

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

Waste Management Acts 1996 to 2003			
THIRD SCHEDULE		FOURTH SCHEDULE	
Waste Disposal Activities	Y/N	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	<input type="checkbox"/>
(b) landfill for non-hazardous waste	<input type="checkbox"/>
(c) landfill for inert waste	<input type="checkbox"/>

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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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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 M DECLARATION

Declaration

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

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

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

Signed by : _____
(on behalf of the organisation)



Date : 16th APRIL 2011

Print signature name: _____ Evan Dolan _____

Position in organisation : _____ Director _____

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Company stamp or seal:

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**

Biocore Environmental AD1 Ltd
Clarity House,
Belgard Road,
Tallaght,
Dublin 24

Tel: 01 4046003

Registered Company No: 492356

Name & Address for Correspondence

As above

(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 1666N 2935

(e) Nature of the Development

Biocore Environmental AD1 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 Biocore Environmental AD1 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).
	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 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	19 08 05	wastes from waste water treatment plants not

waste water		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 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 $\leq 12\text{mm}$

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 EcoPark 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 be 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.

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Figure B.1 Site Location

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

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Figure F.1 Proposed Monitoring Locations

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ATTACHMENT B

Attachment B.1

Company Name:	Biocore Environmental AD1 Ltd
a) Certificate of incorporation:	See Attachment B.1
b) Company Registered Number:	492356
c) Company Directors:	Wayne Byrne Evan Dolan
d) Land interest details	See Drawing B.2 attached

Biocore Environmental AD1 Ltd has been established to develop the facility at Roscommon.

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, 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 the EIS 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. This is the Principal Activity	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes): 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: 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: This activity relates to the storage of waste prior to further recovery off-site.

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Attachment B.1

- Certificate of Incorporation

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ATTACHMENT B.2

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

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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)

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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)

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ATTACHMENT C – MANAGEMENT OF THE INSTALLATION

Attachment C.1 Technical Competence and Site Management

Biocore Environmental Ltd are majority shareholder of Biocore Environmental AD1 Ltd and will provide the necessary technical support and put in place suitable management to operate the facility. Key members of Biocore include:

Wayne Byrne, Director

Wayne Byrne joins the business from BioPower Group plc where he was interim Managing Director for 12 months. Prior to this, Wayne 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 and was successful selling his interest in the business.

Wayne also previously headed up the Public Sector practice for SAP where he was responsible for business development of SAP's 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. Wayne was appointed to the Enterprise Ireland Business Partners Program (May 2010).

Peter Carey, Director

Peter Carey is responsible for the commercial operations for BioCore. Peter is a well established environmental consultant and runs a successful practice which services the Agri, Waste and renewables sector in Ireland and the UK. Prior to setting up his own consulting practice, Peter worked with Bedminster International; the Environmental Protection Agency (EPA); and M.C.O Sullivan & Co Ltd. He has extensive experience of interpreting and applying national and EU legislation and a proven ability in instigating and managing all aspects of projects.

Peter is a Chartered Civil Engineer and a member of the Chartered Institution of Waste Management. He has Masters in Business Administration (MBA), Smurfit School of Business, UCD; MSc, DIC in Environmental Engineering, Imperial College of Science & Technology, London 1994; MEngSc in Geotechnical Engineering University College Galway; and BE (1st Class Hons) in Civil Engineering, University College Galway.

Declan Murray, Director

Declan Murray is responsible for Biocore's operations and logistics. Declan has been running his own management consultancy business and is currently providing high profile operators in the waste business with services following his successful exit from Manvik Ireland Ltd. where he had been Managing Director since 2007. In this role Declan was responsible for implementing strategic procedures and systems that ensured Manvik Ireland maintained its leading position in the Irish waste management sector. Prior to joining Manvik, Declan was the senior operations manager with Dublin Bus, where he worked for 20 years. In that time Declan held many positions within the Company rising from a ground level entry position to the very top of the operations department with responsibility for over €200 million in budgeted revenue.

Declan has a Masters in Business Administration (MBA) from Smurfit Business School at University College Dublin (UCD), a Diploma in Advanced Management from UCD, and a Certificate in Public Sector Management from the Institute of Public Administration in Dublin.

Evan Dolan, Director

Evan Dolan is responsible for the finance function and supports the various elements of the BioCore business as it moves into the commercial phase. Evan also joins us from Manvik Environmental Limited. He joined Manvik in November 2007 when he was appointed as Group Finance Director. Evan had overall responsibility for the finances of Manvik Group and its subsidiaries throughout Ireland and the UK.

Prior to joining Manvik, Evan worked with the ethical fashion design and distribution business, Edun Apparel where he was financial controller for two years. Before that Evan worked for four years with the Irish Continental Group. Evan has a Bachelor of Commerce Degree from University College Dublin (UCD). Following qualification Evan trained to be a chartered accountant at leading professional services firm KPMG in Dublin.

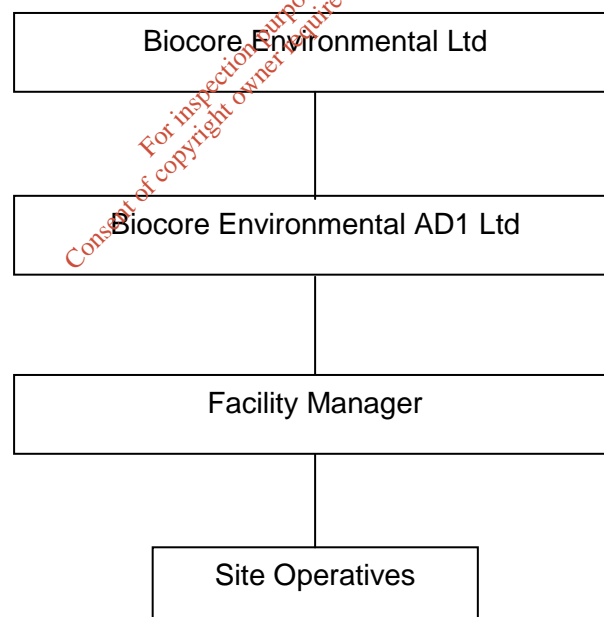
Proposed Facility Management Structure

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.

Biocore Environmental AD1 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.

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ATTACHMENT L - STATUTORY REQUIREMENTS

Attachment L.1 – Statutory Requirements

The information submitted in the Waste Licence Application and its 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 Biocore will ensure BAT is implemented.

Attachment L.2 Fit and Proper Person

Biocore Environmental AD1 Ltd has been established to develop the facility at Roscommon.

The Applicant (Biocore Environmental AD1 Limited) and its shareholders 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 Biocore Environmental AD1 Ltd was only established in 2010 it has no financial history. Financial provisions will be put in place to address risk liabilities at the facility. The cost of managing, developing, operating, and monitoring the facility will be borne by the applicant.

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Number 492356

Certificate of Incorporation

I hereby certify that

BIOCORE ENVIRONMENTAL AD1 LIMITED

is this day incorporated under
the Companies Acts 1963 to 2009,
and that the company is limited.

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Given under my hand at Dublin, this
Tuesday, the 7th day of December, 2010

Par DeL

for Registrar of Companies

Figure B.1
Site Location Map 1:2500
Ballinaphuill, Tibohine, Castlereagh,
Co Roscommon

ITM CENTRE PT. COORDS.
566515,793303

DESCRIPTION

Figure B.1
Location Map

MAP SHEETS

1:2500
1918-B 1918-D

Drawing prepared by:
Tony Dineen BEng. MIEI

BioCore Ltd
Clarity House
Belgard Road
Dublin 24

- Site Boundary
- Land Owned by Kevin Flynn
- Site Notice Location(s)

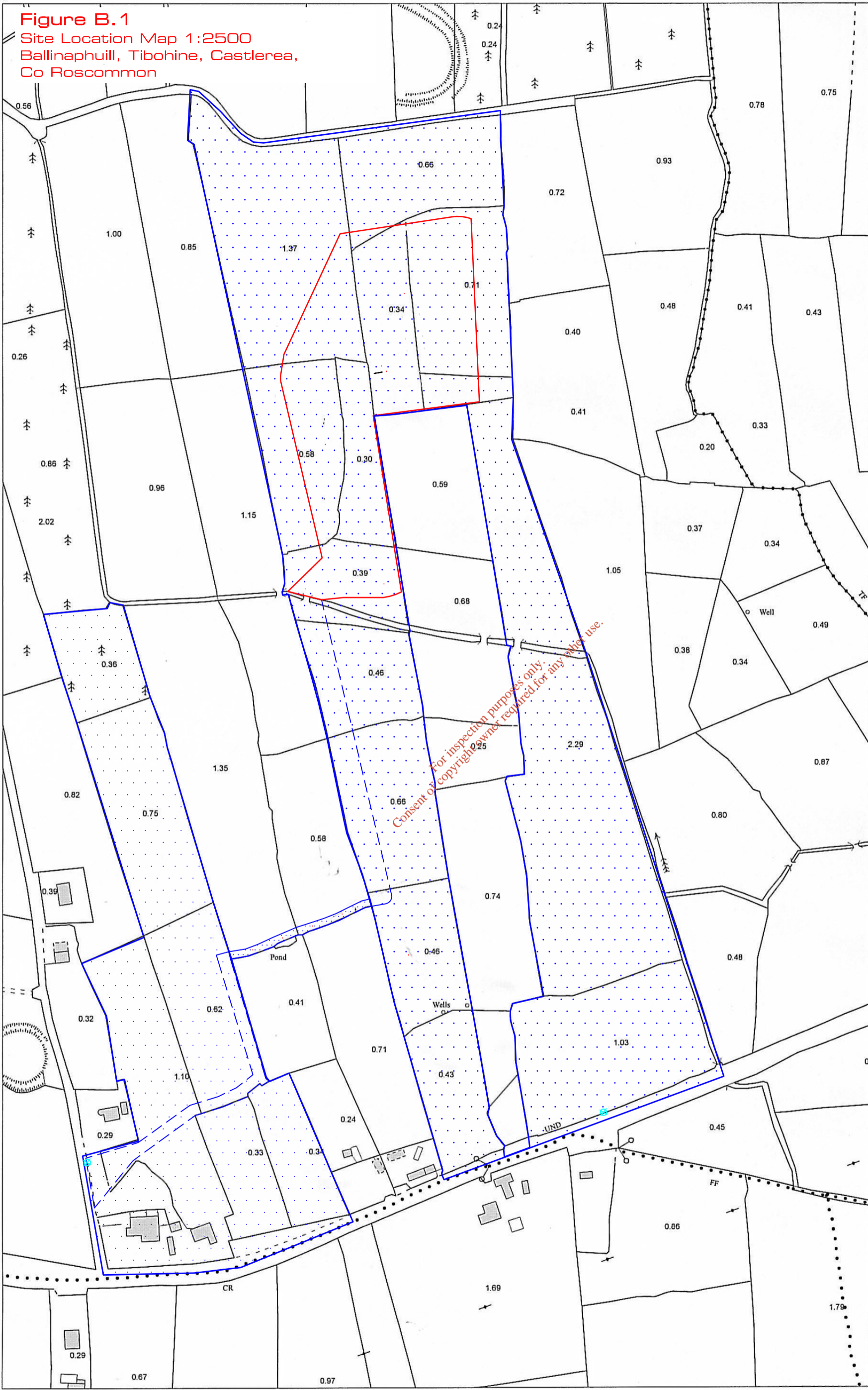


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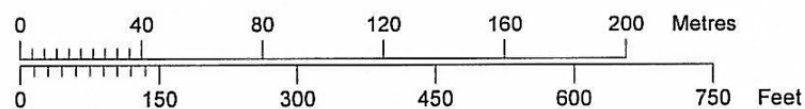
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Scale:- 1:2,500
Scála:- 1:2,500



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

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

ITM CENTRE PT. COORDS.
566515,793303

DESCRIPTION
Figure B.2

Location of Facility to be Licensed

MAP SHEETS
1:2500
1918-B 1918-D

Drawing prepared by:
Tony Dineen BEng. MIEI

BioCore Ltd
Clarity House
Belgard Road
Dublin 24

- Site Boundary
- Land Owned by Kevin Flynn
- Site Notice Location

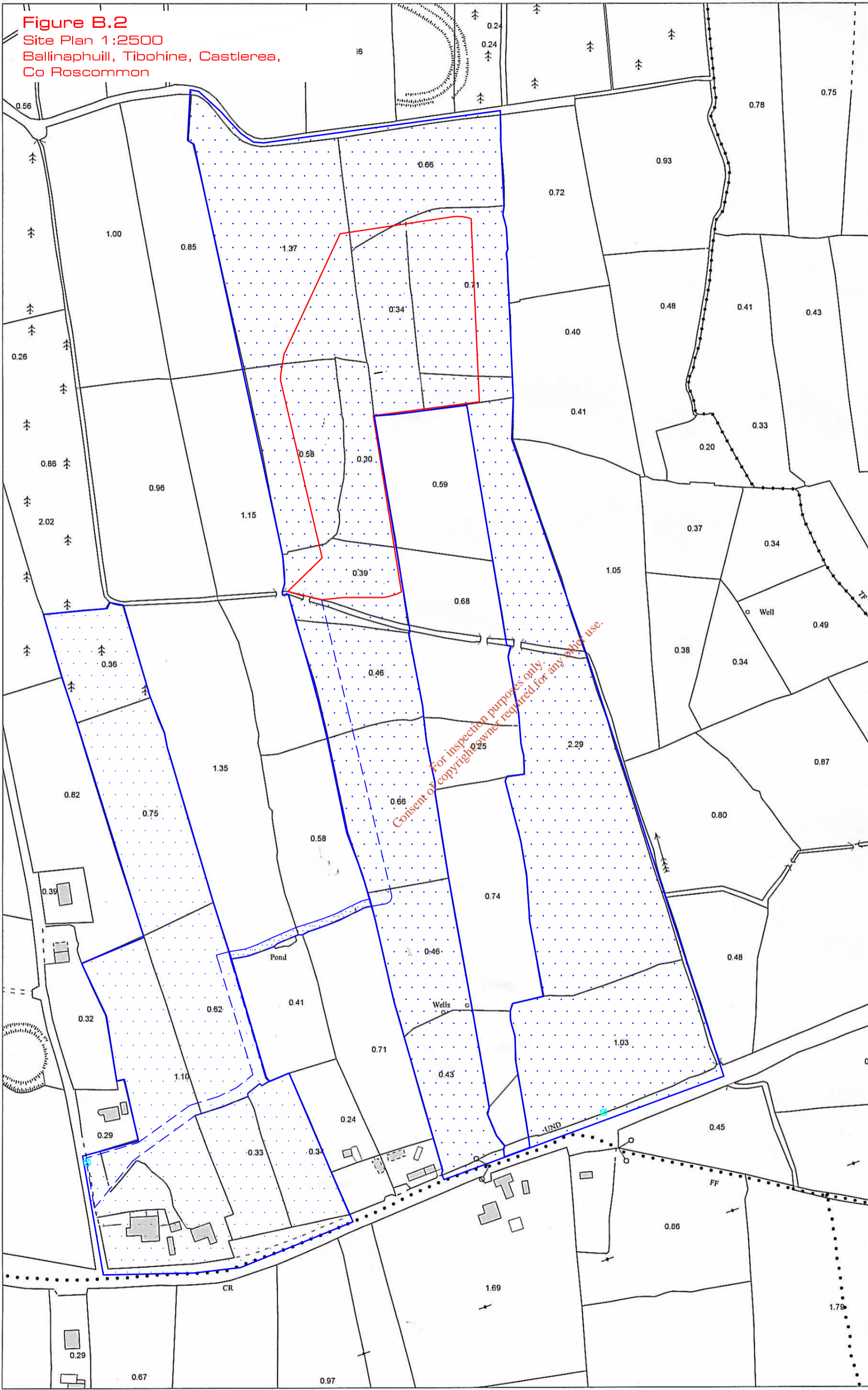


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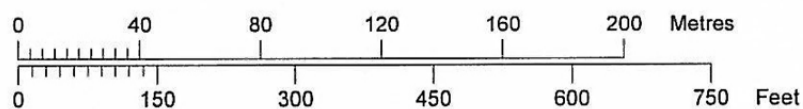
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