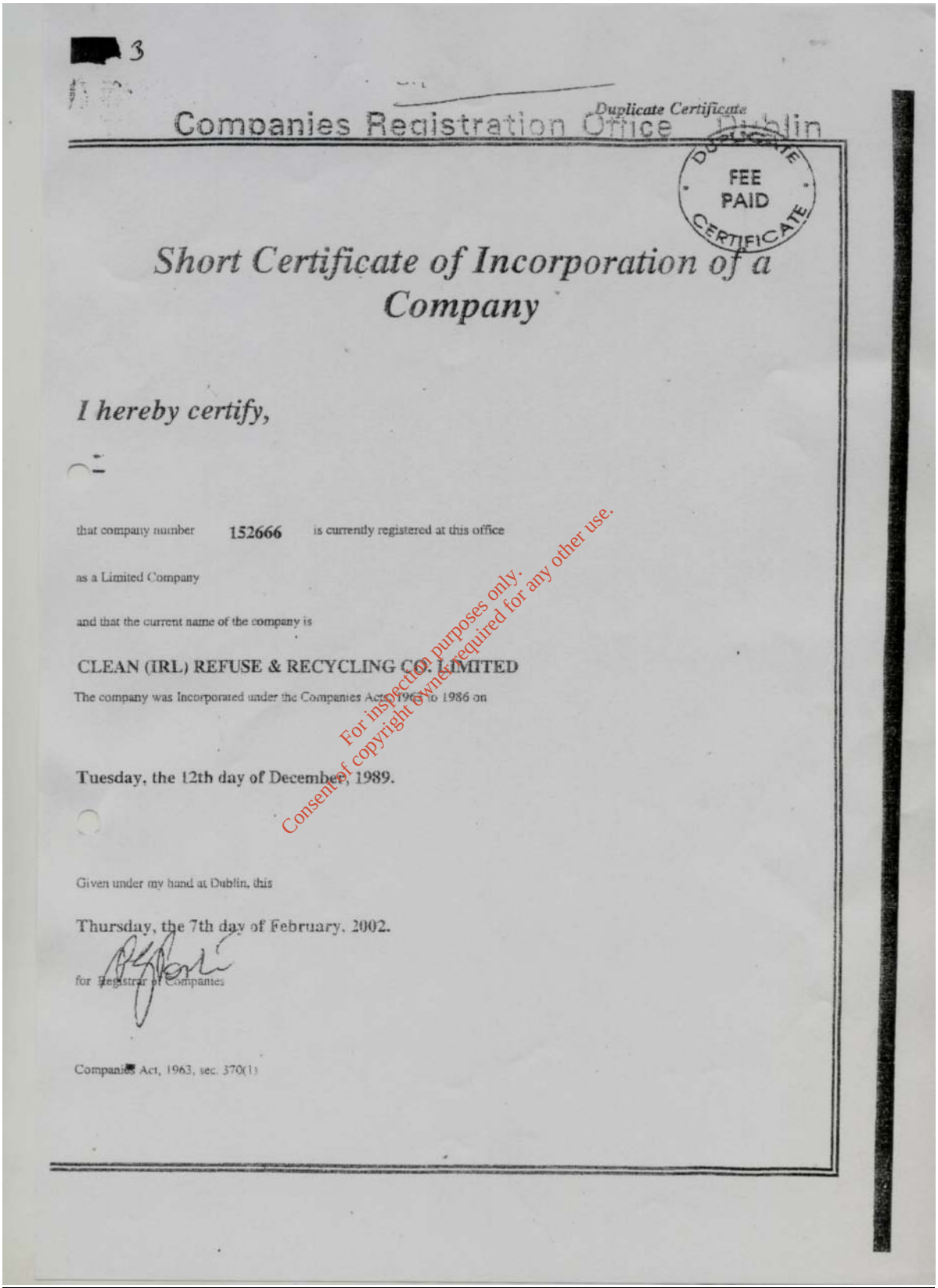
B.1 COMPANY REGISTRATION DETAILS

(a) Find Certificate of Incorporation attached

(b) Company Registration Number 152666

(c) Company Directors

Mr. Michael O'Donoghue
Mr. John O'Donoghue



Companies Registration Office Dublin

Duplicate Certificate

DUPLICATE FEE PAID CERTIFICATE

Short Certificate of Incorporation of a Company

I hereby certify,

that company number **152666** is currently registered at this office

as a Limited Company

and that the current name of the company is

CLEAN (IRL) REFUSE & RECYCLING CO. LIMITED

The company was Incorporated under the Companies Acts 1963 to 1986 on

Tuesday, the 12th day of December, 1989.

Given under my hand at Dublin, this

Thursday, the 7th day of February, 2002.

for Registrar of Companies

Companies Act, 1963, sec. 370(1)

B.2 LOCATION MAPS

(a) Site Plan

- C(IRL)WL-01 Existing site boundary and proposed boundary
- C(IRL)WL-02 Proposed Site Layout

(b) Location Map

- C(IRL)WL-03 Location Map Scale 1:50,000
- C(IRL)WL-04 Location Map Scale 1:5,000
- C(IRL)WL-05 Townland Map Scale 1:10,000

(c) Services Plan

- C(IRL)WL-12 Services Plan Scale 1:1000

B.3 PLANNING PERMISSIONS, WASTE PERMIT & DISCHARGE LICENCE

Environmental Impact Statement

A preplanning consultation was held with Clare Co. Co. on 19th June 2008 with respect to the proposed development of the Clean (Irl) Refuse & Recycling Ltd. facility. Planning items relating to the expansion of the facility include:

(a) Permission for proposed hard standing storage area adjacent to car park
(b) Retention of extensions to existing processing buildings previously granted (Pl Ref 04/2710)
(c) Permission for extension to existing processing building for enclosed construction and demolition waste storage and timber shredding area
(d) Permission for proposed Biostabilisation Plant and proposed Biofilter
(e) Permission for proposed Glass bunkers and End of Life Vehicle Unit
(f) Permission for proposed biomass gasifier and combined heat powerplant
(i) Permission for ancillary works

Clare Co.Co. indicated that a Waste Licence Application should be made prior to applying for planning permission for the development. Clare Co. Co. also instructed that a sub-threshold EIS will be required for this Planning Application. To this end, a completed Environmental Impact Statement supporting Attachment B.3 has been included in this application.

Planning Permissions

The most recent planning permission P08/846 was received 17/08/2008 for (a) permission for material change of use of a dwelling house to administration offices and (b) revision of the existing boundary to include the dwelling and associated land within the facility at Ballynagun West, Cree, Co. Clare.

Preceding this, planning permission P04/2710 was received on 16/11/2005 for “a) retention permission for an existing extension of the waste processing building; for a bunded fuel storage shed; a car park with capacity for 15 cars; extension of the site boundary (b) permission for further extension of the waste processing building, a weighbridge, an office building and a green area to the south of the facility)”.

Planning Permissions P08/486 and P04/2710, with Conditions, are included in this Attachment B.3

Waste Permit

Clean (Irl) Refuse and Recycling Ltd. currently operate under Waste Permit 002/07/WPT/CL granted on the 25th June 2007, this permit is valid for eighteen months (25th December 2008) from date granted (Condition 1.3). The facility is not required to apply for a new Waste Permit at this time giving due regard to the following:

Under Article 3(5) and Article 31 the Waste Management (Facility Permit and Registration) Regulations, S.I. No. 821 of 2007 as amended by the Waste Management (Facility Permit) (Amendment) Regulations, S.I. No. 86 of 2008, it is required to make an application within 60 working days of the date of the extinction of the Waste Permit however, the transitional arrangements under Article 3 (4) state that '*if the WP activity is a type that requires a licence under 2007 Regs, the WP holder shall apply for a Licence within 180 working days of 01/06/2008 and the WP continues under the 1998 Regs until a decision is taken to grant or refuse the Licence at which point the WP will lapse'.*

If effect, the facility will continue to operate under WP 002/07/WPT/CL under the 1998 Regulations beyond the extinction date of the Waste Permit given a Waste Licence Application has been submitted to the EPA. A letter dated 16th September 2008 from Clare Co. Co. and a copy of Waste Permit 002/07/WPT/CL is included in this Attachment B.3.

Licence to Discharge

The facility also operates under the Licence to Discharge to Trade of Sewage Effluent to Waters W.P. 162, granted 29th November 2007, for the purpose of discharging surface waters from the site to the River Cree via drainage ditches. There is no extinction date associated with this. A copy of W.P. is included in this Attachment B.3

Planning Condition

CLARE COUNTY COUNCIL

PLANNING AND DEVELOPMENT ACTS 2000 TO 2004 – NOTIFICATION OF DECISION TO GRANT PERMISSION (SUBJECT TO CONDITIONS) UNDER SECTION 34 OF THE PLANNING AND DEVELOPMENT ACT 2000.

TO: Clean (Irl.) Refuse & Recycling Ltd.,
c/o Sean Creedon,
Bord na Mona Environmental Ltd.,
Main Street,
Newbridge,
Co. Kildare.

Planning Register Number: **P04/2710**

Application Received: 22/12/2004

Further Information Received: 15/7/2005, 13/9/2005 & 20/10/2005

In pursuance of the powers conferred upon it by the above mentioned Acts the Clare County Council has by order dated 16th November, 2005 decided to grant permission for the development of land, namely:

(a) retention permission for an existing extension of the waste processing building; for a bunded fuel storage shed; a car park with capacity for 15 cars; extension of the site boundary (b) permission for futher extension of the waste processing building, a weighbridge, an office building and a green area to the south of the facility (see application form for further details) at Ballynagun West, Cree, Co. Clare.,

The reason for the decision is set out in the First Schedule hereto and is SUBJECT to the conditions set out in the Second Schedule hereto. The reason for the imposition of the said conditions are set out in the Second Schedule hereto (23 conditions)

FIRST SCHEDULE-REASON

Having regard to the setting of the site, the intended use of the proposed development, the policies of the current Development Plan and the pattern of development in the area, it is considered that, subject to the conditions in the second schedule, the proposed development would not seriously injure the amenities of the area or of property in the vicinity

SECOND SCHEDULE-CONDITIONS

1.The development shall be in accordance with plans and particulars submitted on 22/12/04 and further information submitted on 15/07/05, 13/09/05 and 20/10/05 except where conditions hereunder specify otherwise.
Reason: In the interest of proper planning and development.

2.(a) The site shall be landscaped in accordance with the details submitted to the Planning Authority on 13/09/05, save for the northern and eastern boundary of the site that shall be planted with 3metres high native beech trees planted at 2 metre intervals.

(b)Similarly 3 metre high native beech trees shall be planted along the western boundary of the site until they meet with the existing berm on the same boundary.

(c)Any landscaping proposed shall include native or indigenous species. This landscaping shall be implemented not later than the first planting season after commencement of the development. A letter shall be submitted to the Planning Authority indicating that planting has taken place after the first planting season after commencement of the development.

(d)Any planting that is diseased or fails within 2 years of planting shall be replaced.

Reason: In the interest of visual amenity and to protect the rural character of the area.

3.The development shall be so constructed and operated that there will be no emission of malodours, fumes, gas, dust or other deleterious materials, no industrial effluent and no noise vibration or electrical interference generated on the site such as would give reasonable cause for annoyance to any person in any residence or public place in the vicinity.
Reason: In the interest of proper planning and sustainable development.

4.The finished floor level any building proposed shall be the same as those of the existing buildings on site.
Reason: In the interest of visual amenity.

5. Prior to the commencement of development the developer shall pay a contribution of €85,451 to Clare County Council (Planning Authority) in respect of public infrastructure and facilities benefiting the development .

The amount of this contribution is calculated in accordance with the Council's prevailing Development Contribution Scheme and will be increased from January 1st next and annually thereafter (unless previously discharged) in line with the Wholesale Price Index – Building and Construction (published by the Central Statistics Office) unless the scheme is superseded by a further Development Contribution Scheme adopted by the Council.

Reason: It is considered appropriate that the developer should contribute towards the cost of public infrastructure and facilities benefiting the development , as provided for in the Councils prevailing Development Contribution Scheme, made in accordance with Section 48 of the 2000 Planning and Development Act 2000 , and that the level of contribution payable should increase at a rate in the manner specified in that scheme.

6. The surface water, prior to final discharge shall be sampled and analysed for metal and nutrient concentrations at a quarter-yearly interval. The results of this analysis shall be forwarded to the Environment Section and Planning Authority on a quarterly basis. Copies of all analysis shall be available for inspection on site at the request of the Planning Authority.
Reason: In the interest of proper planning and sustainable development.

7(a) The site shall be served by the proposed proprietary treatment system and polishing filter only. The treatment system shall be located, installed and maintained in accordance with the details submitted on 20/10/05. No system other than the type proposed in submissions and approved by this permission shall be installed unless otherwise agreed in writing with the Planning Authority.

(b) A person on the Clare Co. Council Register of independent, suitably qualified agents/consultants who shall certify that it has been completed in accordance with the submitted details shall supervise the construction of the treatment system including, polishing filter. This certification to include suitable photographs shall be submitted to the planning authority within 4 weeks of the completion of these works.

(c) A maintenance contract for the treatment system shall be entered into and paid in advance for a minimum period of 5 years from the date of commissioning and thereafter shall be kept in place at all times. Signed and dated copies of the contract shall be submitted to and agreed with the Planning Authority within 4 weeks of the date of installation.

(d) The soil polishing filter and percolation area shall be surrounded by cut-off drains to ensure no ingress of site drainage from other areas of the site into the area. The cut off drains shall be installed in conjunction with the works specified in condition 2. above.

(e) Uncontaminated storm waters shall be excluded from the wastewater treatment plant and from the soil polishing filter and percolation area. All surface water will pass through an oil interceptor and disposed of as described in documentation submitted on 15/07/05.

(f) Certification by the system manufacturer that the wastewater treatment plant has been properly installed and tested shall be submitted to the planning authority within 4 weeks of the date of installation.

(g)Separation distances as recommended in the EPA Wastewater Treatment Manual, 'Treatment Systems for Single Houses', shall be adhered to.

(h)The polishing filter area shall be fenced off so as to prevent damage and to ensure its continual optimal operation.

(i)The effluent, prior to discharge to ground shall be sampled and analysed for BOD and Suspended Solids on a quarter-yearly interval. The results of this analysis shall be forwarded to the Planning Authority on a quarterly basis. Copies of all analysis shall be available for inspection on site at the request of the Planning Authority

Reason: In the interest of public health.

8. The bored well on site shall not be used for human consumption, only water from the group water scheme shall be used for human consumption.
Reason: In the interest of public health.

9.All soiled surface water shall be directed through hydrocarbon interceptors prior to discharging to the main surface water disposal system.
Reason: In the interests of public health and protection of the receiving environment.

10. All ESB cables shall be located underground.
Reason: In the interest of visual amenity.

11. No advertisement sign, symbol or structure shall be erected (including those which are "exempted development") without planning permission having first been obtained.
Reason: In the interest of proper planning and sustainable development.

12.No accumulation of waste material, debris, derelict vehicles or plant shall be permitted on the site other than as granted permission.
Reason: In the interest of proper planning and development and visual amenity.

13.During the course of construction work the developer shall provide on site a covered skip or other suitable receptacle for the deposit therein of all rubbish, litter, paper, packaging, rubble and other such materials arising from the works and shall ensure that the site and its environs are maintained at all times in a clean and tidy condition.
Reason: To protect the amenities of adjoining properties, in the interest of orderly development.

14.The road improvement proposals as per drawings and information submitted and shall be carried out within 2 months of the grant of this permission. Prior to the commencement of these works the applicant shall liase with the Area Engineer.
Reason: In the interest of traffic safety.

15. The existing road side drain shall be piped from the junction of the regional road to the proposed development site and full details shall be submitted and agreed with

the Area Engineer and Planning Authority prior to the commencement of development.
Reason: In the interest of proper planning and sustainable development.

16. The hours of operation shall be 7.00am to 7.00pm Monday to Saturday (save for bank holidays), unless otherwise agreed in writing with the Planning Authority.
Reason: In the interest of residential amenity.

17. Leacheate material shall be conveyed by a licensed haulier and disposed of as agreed with the details submitted, unless otherwise agreed in writing with the Planning Authority.
Reason: In the interest of proper planning and sustainable development.

18.(a) Any oil tanks to be kept on site shall be bunded to 110% of its effective volume. Walls and base of bund shall be of water tight construction and impervious to the passage of oil.

(b) Hydraulic oils shall be kept on an impervious hardstand area where in the event of spillage such spillage can be contained and safely disposed of.
Reason:To avoid environmental pollution in the interests of amenity, public health and orderly development.

19. All sorting of recyclable material shall take place indoors and arrangements shall be made for the disposal of non-recyclable material, details to be agreed with the Planning Authority prior to the commencement of development.
Reason: In the interest of residential amenity.

20. Noise monitoring shall take place on site and at off site noise sensitive locations located within 500m of the site. Monitoring shall take place on three occasions at least two months apart in every year and results shall be submitted to the Planning Authority.
Reason: In the interest of residential amenity.

21. Prior to the commencement of development, all areas of the site used for vehicular movements and parking shall be of hardsurfaced impermeable material and details of surface water disposal from same shall be agreed with the Area Sanitary Engineer.
Reason: In the interest of proper planning and sustainable development.

22. Prior to the commencement of development the developer shall lodge with the Planning Authority a cash deposit, a bond for an insurance company or such other security as may be acceptable to the Planning Authority in the sum of **€20,000.00** to secure the provision, satisfactory completion of the development including landscaping. In the event of the non-completion or non-provision of the landscaping the Planning Authority shall be empowered to apply the said funds or part thereof for the satisfactory completion of and maintenance as aforesaid of any part of the development.

All such security provided shall be increased from January 1st next and annually thereafter (unless previously discharged) in line with the Wholesale Price Index - Building and Construction (published by the Central Statistics Office). The bond shall remain in full force and effect until discharged by the Council.
Reason: In the interest of orderly development and to ensure satisfactory completion of the development

23. Details of lighting shall be agreed in writing with the Planning Authority prior to the commencement of development.
Reason: In the interest of orderly development

If there is no appeal to An Bord Pleanala Lodged against the said decision, **a grant of permission** with the decision will be issued (after the expiration of the period within which an appeal may be made to An Bord Pleanála (see footnote). It should be noted that, until a grant of permission has been issued and no work shall be commenced on the site, the development in question is NOT AUTHORISED and no work shall be carried out on the site.

Signed on behalf of the said Council **this 16th November, 2005.**

---------- SENIOR STAFF OFFICER, PLANNING SECTION, UNIT 1, WESTGATE BUSINESS PARK, KILRUSH ROAD, ENNIS, CO. CLARE

IMPORTANT NOTE: REGARDING APPEALS

An appeal against the decision of a Planning Authority on an application may be made to An Bord Pleanála. Appeals must be received by An Bord within four weeks beginning on the date of the making of the decision by the Planning Authority. (N.B. not the date on which the decision is sent or received).

An appeal shall:-

(a) Be made in writing and state the name and address of the appellant or person making the referral and of the person, if any, acting on his or her behalf.

(b) State the subject matter of the appeal with details of the nature and site of the proposed development, the name of the Planning Authority, the planning register number and the applicant's name and address (if you are a third party).

(c) State the **full** grounds of appeal with supporting material and arguments. An Bord cannot take into consideration any grounds of appeal or information submitted after the appeal is lodged and it cannot consider non-planning issues; grounds of appeal should not, therefore, include such issues.

(d) be accompanied by the acknowledgement by the Planning Authority of receipt of the submission or observations

(e) be accompanied by the appropriate fee (see attached sheet for details)

The appeal must be fully complete from the start - you are not permitted to submit any part of it later on, even within the time limit.

Submissions or observations made to An Bord by or on behalf of a person (other than the applicant or the appellant) as regards an appeal, shall be accompanied by the appropriate fee and shall be made within four weeks from the receipt of the appeal by An Bord Pleanala

A request An Bord Pleanala for an Oral Hearing shall be accompanied by the appropriate fee and such request must be made within the period for lodging the appeal, but where the developer is sent a copy of a third party appeal, he/she is allowed four weeks from this date.

An Appeal, submission or observation to An Bord will be invalid unless it is accompanied by the appropriate fee.

Note: Under Section 251 of the Planning & Development Act, 2000, where calculating any period referred above, the period between the 24th December, 2005 & 1st January, 2006, both days inclusive shall be disregarded.

All appeals, submissions, observations and other documents should be addressed to **The Secretary, An Bord Pleanála 64, Marlborough Street, Dublin 1** or delivered by hand to an employee of An Bord Pleanála at their offices during office hours (9.15 a.m. to 5.30 p.m. on Monday to Friday, except public holidays and Good Friday): The telephone number of An Bord Pleanála is (01-8588100). Web: http//www.pleanala.ie. email: bord@pleanala.ie.

- A development of 2 or more dwellinghouses is considered as commercial development.
- Under Section 34 (13) of the Planning and Development Act, 2000, a person shall not be entitled solely by reason of a permission or approval to carry out any development

CLARE COUNTY COUNCIL

PLANNING AND DEVELOPMENT ACT 2000 – 2006 NOTIFICATION OF GRANT FOR A PERMISSION (SUBJECT TO CONDITIONS) UNDER SECTION 34 OF THE PLANNING AND DEVELOPMENT ACT 2000

TO: Clean Ireland Refuse & Recycling Ltd
C/o Ms. Helen Behan, Environmental Consultants
Bord na Mona Environmental Ltd.
Main Street
Newbridge, Co. Kildare

Planning Register Number: P08/846

Application Received on: 28/05/2008

Application of Clean Ireland Refuse & Recycling Ltd, C/o Ms. Helen Behan, Environmental Consultants, Bord na Mona Environmental Ltd. Main Street, Newbridge, Co. Kildare for (A) permission for material change of use of a dwelling house to administration offices and (B) revision of the existing boundary to include the dwelling and associated land within the facility at Ballynagun West, Cree, Co. Clare.

Having regard to the existing use established on site, the intended use of the proposed development, the policies of the current Development Plan and the pattern of development in the area, it is considered that, subject to the conditions in the second schedule, the proposed development would not seriously injure the amenities of the area or of property in the vicinity and would otherwise be in accordance with the proper planning and sustainable development of the area.

A permission has been granted for the development described above subject to the following 3 conditions:

1. The development shall be carried out in accordance with plans and particulars received by the Planning Authority on the 28/05/2008 except where conditions hereunder specify otherwise.

2. The existing front boundary wall and hedgerow shall be retained and shall not be removed unless without a prior grant of planning permission.

3. Prior to the commencement of development the developer shall pay a contribution of €1527.24 to Clare County Council (Planning Authority) in respect of public infrastructure and facilities benefiting the development.

   The amount of this contribution is calculated in accordance with the Council's prevailing Development Contribution Scheme and will be increased from January 1st next and annually thereafter (unless previously discharged) in line with the Wholesale Price Index – Building and Construction (published by the

Central Statistics Office) unless the scheme is superseded by a further Development Contribution Scheme adopted by the Council.

Signed on behalf of Clare County Council.

Senior Staff Officer
Economic Development & Planning Department.

Dated: 17/08/2008

B.6 NOTICES & ADVERTISMENTS

(a) A copy of the text of the site notice
(b) Whole page of original newspaper advertisement (for original) & copy of newspaper notice
(c) Copy of notice to Clare Co. Co.

(a)

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTE LICENCE.

Clean (Irl) Refuse & Recycling Ltd., Cree, Co. Clare are applying to the Environmental Protection Agency for a Waste Licence in respect of their Waste Transfer Station located at Ballyinagun West, Cree, Co. Clare. An Environmental Impact Statement accompanies the waste licence application. The National Grid Reference of the site is 102728N, 165969E.

The proposed site is a waste transfer station with the type of plant in use including mechanical waste separation equipment, baling equipment and mobile plant with grab attachments. The nature of the waste is that of domestic household waste, commercial waste (non-hazardous), construction and demolition and End of Life Vehicles. It is proposed that when the facility is operating at full capacity that it will accept 64,600 tonnes of waste per annum.

The relevant waste disposal and waste recovery activities, as per the Third and Fourth Schedules of the Waste Management Acts 1996 to 2008 to which this application relates are:

Third Schedule – Waste Disposal Activities

Class 12: 'Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule'

Class 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.'

Fourth Schedule – Waste Recovery Activities

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

Class 3: 'Recycling or reclamation of metals and metal compounds.'

Class 4: 'Recycling or reclamation of other inorganic materials.'

Class 9: 'Use of nay waste principally as a fuel or other means to generate energy'.

Class 11: 'Use of waste obtained from any activity referred to in a preceding paragraph of this schedule'

Class 12: 'Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule'

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 the waste is produced.'

The principal activity will be Class 2 of the Fourth Schedule.

A copy of the application for a waste licence and attachments, 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 is practicable after receipt by the Agency, be available for inspection or purchase, at the headquarters of the Agency at Johnstown Castle, Co. Wexford.

Signed: Michael O'Donoghue

PLANNING APPLICATIONS

Ennis Town Council
Roslevan, Tulla Road, Ennis.
Take notice that Glidoc Ltd. are applying to Ennis Town Council for full planning permission to construct a single storey standalone building, consisting of: ESB MV substation, ESB switching room, maintenance shed, refuse shed together with associated site works and services all at the above address. The planning application may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy at the offices of Ennis Town Council, Waterpark House, Drumbiggle, Ennis, Co. Clare, during its public opening hours of 9am to 4pm and that a submission or observation in relation to the application may be made to the Authority in writing on payment of the prescribed fee within the period of five weeks beginning on the date of receipt by the Authority of the application.

Clare County Council
Knock, Inch, Ennis.
Take notice that Patrick Carmody Construction Ltd are applying to Clare County Council for the following: (a) permission to retain use of the existing building on site for the storage of construction plant and equipment (b) permission to construct a 585m² shed, 435m² will be used for agricultural purposes, with 150m² to be used as a storage area for plant and machinery along with associated site works at the above address (c) On completion of the new shed, the existing building will revert to agricultural purposes. The planning application may be inspected or purchased, at a fee not exceeding the cost of making a copy, at the offices of the Planning Authority, Clare County Council, Áras Contae an Chláir, New Road, Ennis, Co. Clare, during its public opening hours and that a submission or observation in relation to the application may be made to the Authority in writing on the payment of the prescribed fee within the period of five weeks beginning on the date of receipt by the Authority of the application.

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTE LICENCE

Clean (Irl) Refuse & Recycling Ltd., Cree, Co. Clare are applying to the Environmental Protection Agency for a Waste Licence in respect of their Waste Transfer Station located at Ballinagun West, Cree, Co. Clare. An Environmental Impact Statement accompanies the waste licence application. The National Grid Reference of the site is 102728N, 165909E.

The proposed site is a waste transfer station with the type of plant in use including mechanical waste separation equipment, baling equipment and mobile plant with grab attachments. The nature of the waste is that of domestic household waste, commercial waste (non-hazardous), construction and demolition and End of Life Vehicles. It is proposed that when the facility is operating at full capacity that it will accept 64,600 tonnes of waste per annum.

The relevant waste disposal and waste recovery activities, as per the Third and Fourth Schedules of the Waste Management Acts 1996 to 2008 to which this application relates are:

Third Schedule – Waste Disposal Activities
Class 12: 'Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule'
Class 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.'

Fourth Schedule – Waste Recovery Activities
Class 2: 'Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).'
Class 3: 'Recycling or reclamation of metals and metal compounds.'
Class 4: 'Recycling or reclamation of other inorganic materials.'
Class 9: 'Use of any waste principally as a fuel or other means to generate energy'.
Class 11: 'Use of waste obtained from any activity referred to in a preceding paragraph of this schedule'
Class 12: 'Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule'
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 the waste is produced.'

The principal activity will be Class 2 of the Fourth Schedule.

A copy of the application for a waste licence and attachments, 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 is practicable after receipt by the Agency, be available for inspection or purchase, at the headquarters of the Agency at Johnstown Castle, Co. Wexford.

Signed: Michael O'Donoghue

BORD NA MÓNA

BORD NA MÓNA ENVIRONMENTAL LIMITED

Planning and Economic Development,

Clare Co. Co.,

New Road,

Ennis,

Co. Clare

22nd December 2008

Re: APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTE LICENCE.

Dear Sir/Madam,

Clean (Irl) Refuse & Recycling Ltd., Cree, Co. Clare are applying to the Environmental Protection Agency for a Waste Licence in respect of their Waste Transfer Station located at Ballyinagun West, Cree, Co. Clare. An Environmental Impact Statement accompanies the waste licence application. The National Grid Reference of the site is 102728N, 165969E.

The proposed site is a waste transfer station with the type of plant in use including mechanical waste separation equipment, baling equipment and mobile plant with grab attachments. The nature of the waste is that of domestic household waste, commercial waste (non-hazardous), construction and demolition and End of Life Vehicles. It is proposed that when the facility is operating at full capacity that it will accept 64,600 tonnes of waste per annum.

The relevant waste disposal and waste recovery activities, as per the Third and Fourth Schedules of the Waste Management Acts 1996 to 2008 to which this application relates are:

Third Schedule – Waste Disposal Activities

Class 12: 'Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule'

Class 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.'

REGISTERED OFFICE: MAIN STREET, NEWBRIDGE, CO. KILDARE, IRELAND. REGISTERED NO: 303313
TELEPHONE: (045) 439000. INT: +353-45-439000. FAX: (045) 434207. INT: +353-45-434207.

Directors: R Scanlan (Chairman), P Bennett, P Fox, C Ó Gógáin

Fourth Schedule – Waste Recovery Activities

Class 2:	'Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).'
Class 3:	'Recycling or reclamation of metals and metal compounds.'
Class 4:	'Recycling or reclamation of other inorganic materials.'
Class 9:	'Use of nay waste principally as a fuel or other means to generate energy'.
Class 11:	'Use of waste obtained from any activity referred to in a preceding paragraph of this schedule'
Class 12:	'Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule'
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 the waste is produced.'

The principal activity will be Class 2 of the Fourth Schedule.

A copy of the application for a waste licence and attachments, 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 is practicable after receipt by the Agency, be available for inspection or purchase, at the headquarters of the Agency at Johnstown Castle, Co. Wexford.

Yours Faithfully,

Helen Behan

Helen Behan
Environmental Consultant
Environmental Consultancy Services
Bord na Móna Environmental Ltd.

B.7 TYPES OF WASTE ACTIVITY, TONNAGES & FEES

The principal activity for the facility is dry recyclables processing in accordance with Schedule 4.2 of the Waste Management Acts 1996-2003 'Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes)'.

A description of the principal activity is provided in Section 2.2.2.4.1 of the EIS.

Other proposed activities are described in the EIS in the following sections:

(i) Wet waste processing (Section 2.2.2.4.2)
(ii) Timber shredding processing (Section 2.2.2.4.4)
(iii) Construction and Demolition waste processing (Section 2.2.2.4.5)
(iv) Biostabilisation Plant (Section 2.3.2.1)
(v) Biomass Recovery Plant (Section 2.3.2.7)
(vi) End of Life Vehicle unit (Section 2.3.2.4)

C.1 TECHNICAL COMPETENCE AND SITE MANAGEMENT

Details of the applicants's experience and qualifications, along with that of other relevant employees, asre summariesed below.

Name	Position	Duties and Responsibilities	Experience/Qualifications
Michael O'Donoghue	Director	General Management and Provision of Resources	Fifteen years of experience in waste industry
John O'Donoghue	Director	General Management and Provision of Resources	Ten years experience in waste industry
Paddy Hedigan	Operations Manager	Oversees all site operations	Five years of experience in waste management industry. Paddy is a FAS trained Facility Manager and also hold a diploma from University of Limerick in Health & Safety in the workplace
Mark Kerin	Environmental Officer	Oversees Environmental Aspects	Three years of experience in waste management industry and also hold a Bachelor of Science degree in environmental science from the University of Limerick

The current management structure is shown below:

C.2 ENVIRONMENATL MANAGEMENT SYSTEM

The EMS consists of the following procedures:

CIR20-100	Yard Activities
CIR20-101	Weigh Bridge Activities
CIR20-102	Corrective Action Procedure
CIR20-103	Emergency Responce Procedure
CIR20-115	Completion of Waste Anaysis Rports
CIR20-116	Skip/Delivery Collection
CIR20-117	Timber Shredder
CIR20-122	Monitoring and Measuring
CIR20-123	Environmental Reporting Procedure
CIR20-125	Objectives and Targets procedure
CIR20-126	Operation and Maintenance of Bypass Separator
CIR20-127	Sorting of Skip Waste
CIR20-128	Biostabilisation Plant Operation
CIR20-129	Biostabilisation Plant Leachate Management Plan
CIR20-130	Biostabilisation Plant Biofilter Management Plan
CIR20-131	Odour Management Plan
CIR20-132	Biostabilisation Plant Maintenance Plan

Clean (Ireland) Refuse & Recycling Ltd. has an Environmental Policy in place as shown below.

Clean (Ireland) Refuse & Recycling Ltd

Environmental Policy

Clean Ireland Refuse and Recycling recognise that we have a responsibility to demonstrate sound environmental awareness, management and sustainability through the implementation of best practice where possible.

This environmental policy has been developed to cover the operations of Clean Ireland Refuse and Recycling, Ballinagun, Cree, Kilrush, Co. Clare.

Clean Ireland Refuse and Recycling accepts responsibility for, and a commitment to, protection of the environment at all levels within the organisation. We will comply fully with the environmental legislation and aim to reduce our environmental impacts.

- Minimising waste by reduced consumption and operation of effective and environmental sound waste management and recycling.
- Reducing energy consumption through effective education and awareness and installation of energy efficient technology where appropriate.
- Environmental Policy Statement is made available to all Clean Ireland employees.
- Progress in implementing this policy will be regularly reviewed and reported to Clean Ireland senior management by representatives of the Environmental Officer.

C. 3 HOURS OF OPERATION

(a) Proposed hours of operation:

7a.m. to 10p.m. Monday to Friday
7a.m. to 2p.m. Saturday

(b) Proposed hours of waste acceptance/handling

8a.m. to 8p.m. Monday to Friday
8a.m. to 1p.m. Saturday

(c) Proposed hours of any construction and development works at the facility and timeframes

9a.m. to 6p.m. Monday to Friday
9a.m. to 1p.m. Saturday

(d) Not applicable

D.1 INFRASTRUCTURE

(a) Site Security arrangements including gates and fencing

The north (front) of the facility is bounded by heavy metal gates with a half concrete/half metal fence on either site. The administrative offices, which has recently received planning permission (P08/P46 17th July 2008) for Material Change of Use (from dwelling to administrative offices) currently is a low rise with an entrance and driveway. Under the planning conditions this access will be closed off to a level of the existing security fencing. The western boundary consists of 7ft high wire mesh fence from the road at the north of the facility to opposite the most north-westerly corner of the processing building. A 9ft high boundary earthen bank continues along the east of the site. The southern boundary is in the form of earthen berms, which is landscaped with Common Alder and Scarlet Willow; post and wire fencing sets the boundary with adjoining lands. The eastern boundary is a combination of post and wire fencing with natural hedgerows at the southern end. Adjacent to the processing buildings the boundary is earthen berms landscaped with trees with a support wall comprising of railway sleepers.

(b) Design for site roads

Waste vehicles may access Clean (Ireland) Refuse and Recycling from an easterly direction only, using the R483 Kilrush to Quilty regional road and the L-6108. The haul routes for the proposed site and the access roads for the site are shown in are included in this attachment.

- C(IRL)WL-17 (Traffic Routes)
- C(IRL)WL-13 (Haul Routes)

(c) Design of hardstanding areas

The extent of the hardstanding and the surface water drainage are shown in drawings included in this attachment.

- C(IRL)WL-23 (Hardstanded area)
- C(IRL)WL-19 (Surface Water Drainage Plan)

(d) Plant

The capacity of the weigh bridge is 50 tonnes. The dimensions are shown in drawing C(IRL)WL-24 which is included in this attachment. The record keeping system for the weighbridge is as follows:

Every vehicle that enters the facility with material for recycling/recovery is weighed and this weight is printed out on a Clean Ireland Recycling weighbridge docket. Printed on this docket is the date, time, a unique transaction number and an initial weight for the material that has entered the facility. Also recorded manually on this docket is the name of customer/driver, the composition of the material (residual, dry recyclables etc.), registration number of the vehicle and the local authority area of origin of the material (Clare, Limerick County, Limerick City, Kerry). The material is then tipped in the appropriate shed and the vehicle returns to the weighbridge and a second weight is obtained. Every transaction is recorded individually on our system this includes each item referred to above (date, customer name and origin of material). The document that this transaction is recorded in is divided in twelve different sections one for every month. Each month is then divided into sections for recording the date, vehicle registration and customer name and is further separated into approximately forty sections for different material that would be crossing over the weighbridge. These sections are then summarised on a monthly basis and records can be easily obtained in relation to the total quantity of material that entered the facility in a particular month.

Any vehicle that arrives to the facility to transport recyclable material is weighted in the same way as previous described above. The container number, seal number, material that is being collected material is also recorded. The weight of each material that leaves the site is also recorded in a separate document. This document is divided into the different range of products that leaves the site ranging from cardboard, mixed paper plastic bottles etc.

These records then go onto completed our Annual Environmental Report for the year.

(e) Wheelwash

The facility is proposing to install a Speedwash Automatic Underbody & Wheel Wash. This will include the following:

1 No. Single Boom Underbody & Wheel Wash System comprising of Stainless Steel underfloor boom with 12 no. Spray jets fitted at strategic positions to wash underbody and wheels of trucks as they pass over it. 2 No. Side booms each with 3 spray jets to wash outside of wheels and chassis. The main boom and both side booms are rotated through an angle of 90° by a geared motor to give better cleaning effect. The booms are mounted on a heavy duty mild steel frame, galvanised dipped complete with sealed bearings, swivel, control linkage and associated fittings. All of the above equipment is located in an underfloor duct on washbay with heavy duty galvanised gratings on top.

Pump Set

1 No. Grundfos CR32-9 Multistage Pump with 18.5kw close coupled motor, 3 phase 380 volts complete with BSP pump flanges, stainless steel ballvalve, solenoid valve, water filter, stainless steel pipework and fittings. The Pump will deliver up to 600 litres per minute at 150 P.S.I.

Water Supply Tank

1 No. 5000L Polyproplene Water Supply Tank complete with lid, 2" stainless steel ball valve, 2" ballcock & float, low level switch and associated fittings.

Electrical Control Panel

1 No. Electrical Control Panel comprising of contactors, overload, MCB, panel isolator, transformer, relay, timer, loop sensor control unit, start/stop buttons, run & trip lights all housed in an IP65 enclosure.

Automatic Operation

The machine is controlled by under-floor loop sensors located at entrance to the wash, which sends signals to control panel to give ignition. When the truck leaves the washbay the system times out and shuts down.

(f) Laboratory facilities

Not applicable

(g) Design and location of fuel storage

The existing fuel storage area will be replaced by a portable 60,000 litre fuel storage portable container will a bund capacity of 110%. All hydrocarbons currently stored in the existing fuel storage are will be relocated to this unit. It is proposed to locate all fuel storage to this area as shown in Drawing C(IRL)WL-02 in Attachment B.2. The fabric will be plastic and the tanks will be covered. The unit will be portable and may be relocated using a crane, putting all environmental measures into place prior to any such procedure on site to eliminate risk of environmental incident. Diesel required for the generator is stored in an individually bunded tank at the east of the facility.

(h) Waste Quarantine Areas

The existing quarantine areas are at located at a designated area in the wetwaste area (indoors) and also in a designated area adjacent to the skip dropdown area. Quarantined items are removed when identified through inspection of waste consignments and are removed to the designated areas where any item is retained in a bunded unit. The proposed waste quarantine area will be relocated to the internal construction and demolition waste storage building which will be constructed as part of the extension to the existing processing buildings.

(i) Waste inspection areas

All waste arriving on site is subject to visual inspection, any waste deemed unsuitable for processing and/or in contradiction to the permit shall be immediately separated, stored in a designated quarantined area and removed from the site as soon as possible. Waste inspection will take place for refuse, dropdown, open containers, brown bin and glass at their respective processing areas and as per SOP CIR20-100Rev3 as previously attached in Attachment C.2 Environmental Management System.

(k) Traffic Control

A site speed limit of 10km per hour is enforced around the facility. It is proposed to create a one-way system with the introduction of the new biostabilisation plant at the rear of the site. Traffic will associated with this activity will access the south section of the site from the existing roadway running along the west of the facility. Once waste has been tipped in the biostabilisation building, the vehicles will continue to travel forward to the east perimeter running parallel with the southern boundary. This traffic will then turn left running parallel to the ESB sub station and left again parallel to the south face of the waste processing buildings. This will alleviated any congestion at the rear of the site. All vehicles will enter and leave via the weighbridge. Skip trucks crossing the road to place empty skips into storage in the skip storage area will be infrequent and no traffic impact is anticipated.

(k) Sewerage and surface water draining infrastructure

Domestic Wastewater

The existing onsite Puraflo and mini platinum wastewater treatment system with a P.E. 19 will serves the site and treated wastewater is discharge to a percolation area at the south of the site as shown on drawing C(IRL)WL-02 in attachment B.2. The wastewater treatment systems is sufficient to support the site development, during construction and operational phase.

Surface Water

There will be no alteration to the existing surface water management plan for the site. Details of the surface water drainage are provided in (c) above. The storm water flows from the skip storage area phase 1 will be incorporated into the existing drainage for the north of the site and for employee car park. Phase two is a larger area and may have a second interceptor installed if deemed necessary. All surface water from the facility is passed through a silt/oil interceptor into field drainage ditches and ultimately into the River Cree.

(i) All other Services

Water Requirement & Supply

The proposed development does not require water during waste processing operations. Water is supplied to the site from the on-site bored well or the Drumehilly Group Water Scheme. There is no water mains connection for the site. Water is required to carry out the flowing activities on site:

- Domestic services
- Wheel wash

- Wheelie bin/truck washing
- Dust suppression spraying during dry periods
- Fire fighting
- Biomass Recovery Plant

Drinking Water
Drinking water is supplied from either the on-site bored well, which is passed through a filtration system. Alternatively water is sourced from the Drumehilly-Cree group water scheme.

Rainwater Harvesting
Rain harvesting is currently in practice from roof runoff into a tanker at the west face of the processing building. This water provides flushing water for the toilets.

Telecommunications
Telecommunications are already in place for the facility.

Electricity Supply
The site is served by electricity (underground lines) and ESB substation is currently being built will have an import·capacity·of·420·kva on completion.

(m) Plants sheds, garages and equipment compound
See drawing C(IRL)WL-02 in Attachment B.2

(n) Site Accommodation
See drawing C(IRL)WL-02 in Attachment B.2

(o) A fire control system, including water supply.
There is no fire hydrant at the facility or mains water. Clean firewater is retained in a fire truck for the facility with a capacity of 800 litres. Fire extinguishers are located at various locations around the facility and routinely maintained.

(p) Civic Amenity facilities
The site does not have a civic amenity area.

(q) Any other waste recovery infrastructure
A small biomass renewable energy system (1MW) which will be built at the site to convert clean wood and paper to meet the site demand for electricity with the potential to feed surplus electricity into the national electricity grid. The system will be located along the eastern site boundary adjacent to the wood processing and storage area. The system will be capable of converting clean dry wood and paper into hydrogen, via a gasification technology, and use the hydrogen as a fuel for powering a motor to drive a 1MW electrical generator.

(r) Composting Infrastructure
See EIS Section 2.0, subsection 2.3.2.1 for a detailed description of the Biostabilisation Plant. The plant will be in the form of two separate buildings (tipping and curing) with negative pressure and a ventilation system with four to six changes in air hourly, or as required. The six aerated concrete tunnels will be located externally to the tipping and curing building. The building fabric of the plant will mainly comprise of concrete, with cladding to the eaves. Concrete push walls are required internally which will be constructed 2-3 metres high for handling of waste piles with plant machinery. Doors at each end will be erected for access to the concrete tunnels. In addition to the biostabilisation plant,

infrastructure will included two odour removal and treatment systems: a wet scrubbing system and a biofilter. The internal and external layout of the Bio-stabilisation plant is included in this Attachment.

- C(IRL)WL-27 (Biostabilisation Plant Layout)

(s) Construction and Demolition waste infrastructure

See EIS Section 2.0, subsection 2.3.2.2 for a detailed description of the trommel infrastructure and proposed C&D waste storage building. The area at the south-west of the processing buildings is currently used for C&D waste storage and C&D waste processing. C&D waste is sorted using a picking line and separation of metals. The C&D waste is passed through a trommel and the fines are collected and transported to landfill for disposal. There is currently no cover over the C&D waste storage area. It is proposed to house the C&D waste which will eliminate contact between rainwater and the stockpiled inert C& D waste while in storage at the facility.

(t) Incineration Infrastructure

Not applicable

(u) Any Other infrastructure

Glass bunkers

See EIS Section 2.0, subsection 2.3.2.1 for details.

End of Life Vehicle units

See EIS Section 2.0, subsection 2.3.2.4 for details.

Biomass Recovery Plant

See EIS Section 2.0, subsection 2.3.2.7 for details.

Timber Shredder Enclosure

See EIS Section 2.0, subsection 2.3.2.2 for details.

Wheelie Bin/Truck Wash

See EIS Section 2.0, subsection 2.3.2.5 for details.

D.2 FACILITY OPERATION

Emissions related to the activities listed below are limited to those from the use of plant and forklifts with the exception of the Biostabilisation plant and Biomass Recovery Plant.

All other plant is operated using electricity generated on site including the use of a diesel generator. The generator (Model STMO) is a 500kw with a 500kVA and runs for c. 44hrs/week. The facility operates on a three phase electricity supply. It is envisaged that the Biomass Recovery Plant (0.5MW) will support the energy demands of the Biostabilisation Plant.

Biostabilisation plant abatement is detailed in EIS Section 2.3.1.1.2 Air Extraction and Section 2.3.2.1.3 Odour Control.

(a) List of Unit Operations

D.2(i) Dry recyclable processing
D.2(ii) Wet waste processing
D.2(iii) Baling of material
D.2(iv) Dropdown skip processing
D.2(v) Timber shredding processing
D.2(vi) Construction and Demolition waste processing
D.2(vii) Biostabilisation Plant
D.2(viii) End of Life Vehicle unit
D.2(ix) Wheelie bin/truck wash
D.2(x) Wheel wash
D.2(xi) Biomass recovery plant
D.2(xii) Skip storage area

Drawing C(IRL)WL-02 Site Layout Plan illustrates the location of the activities as attached in Attachment B.2.

(b) Flow Diagrams for the following processes are included in Attachment 4 of the EIS Attachments; Sections referenced of the EIS outline the management of the processes:

(vii) Dry recyclable processing (Section 2.2.2.4.1)
(viii) Wet waste processing (Section 2.2.2.4.2)
(ix) Baling of material
(x) Dropdown skip processing (Section 2.2.2.4.3)
(xi) Timber shredding processing (Section 2.2.2.4.4)
(xii) Construction and Demolition waste processing (Section 2.2.2.4.5)
(xiii) Biostabilisation Plant (Section 2.3.2.1)
(xiv) Biomass Recovery (Section 2.3.2.7)
(xv) End of Life Vehicle unit (Section 2.3.2.4)

Waste Handling Procedures (ref H3) for activities at the facility is defined by two SOP's as included in Attachment C.2 Environmental Management Systems:

- SOP CIR20-100Rev3 Yard Activities
- SOP CIR20-128 Biostabilisation Plant Operation

(c) Emissions generated as follows:

Emissions to Groundwater- treated domestic wastewater

Emissions to Sewer- None

Emissions to Surface Waters-	Stormwater runoff from hardstanded areas only
Emissions to Air-	Environmental Dust and Noise, The Biofilter, Biomass Recovery Plant and diesel generator are sources of emission to air and include biofilter parameters, Bioaerosols, SOx, N0x, C0, NMHC (Non Methane Hydrocarbons) and particulates.

A malfunction in the wastewater treatment unit, biofilter and odour scrubber, leachate holding tank, hydrocarbon bunds, End of Life Vehicle hyrdrocarbon and hazardous waste storage areas, integrity of quarantine area or failure to implement environmental procedures under the EMS could potentially result in a release to the environment.

ATTACMENT E EMISSIONS

Drawing C(IRL)WL-06 outlines the existing emissions/monitoring locations for the facility in Attachment F.

Drawing C(IRL)WL-07 outlines the proposed emissions/monitoring locations for the facility in Attachment F.

Attachment E.1 Emissions to Atmosphere.

Emissions to the atmosphere are discussed in Section 3.6 Air of the EIS. The main emissions to atmosphere includes the Biofilter and Biomass Recovery Plant.

Minor Emissions include: Diesel Generator
Domestic Woodchip burner

Fugitive emissions include: Dust
Odour

Attachment E.2 Emissions to Surface Water

Emissions to surface water are discussed in Section 3.4 Hydrology of the EIS.

Attachment E.3 Emissions to Sewer

Not Applicable.

Attachment E.4 Emissions to Groundwater

Emissions to surface water are also discussed in Section 3.5 Hydrogeology of the EIS.

Attachment E.5 Noise Emissions

Noise emissions are also discussed in Section 3.7 Noise and Vibration of the EIS.

Attachment E.6 Environmental Nuisances

Environmental Nuisances are also discussed in Section 3 of the EIS.

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

Emission Point Ref. N^{o}:	A2-1
Source of Emission:	Biofilter
Location :	Southern boundary
Grid Ref. (12 digit, 6E,6N):	Not Available
Vent Details Diameter: Height above Ground(m):	Not Available
Date of commencement:	Not Applicable

Characteristics of Emission :

(i) Volume to be emitted: **Not Available**			
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: 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)	60 min/hr 24 hr/day 365 day/yr

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

Emission Point Ref. N^{o}:	A2-2
Source of Emission:	Biomass Recovery Plant
Location :	Eastern location within boundary
Grid Ref. (12 digit, 6E,6N):	Not Available
Vent Details Diameter: Height above Ground(m):	 Not Available 13
Date of commencement:	Not Applicable

Characteristics of Emission :

(i) Volume to be emitted: **Not Available**			
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: 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: *A2-1*

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
Hydrogen Sulphuide	5 ppm	5 ppm			Not Applicable						
Mercaptans	5ppm	5ppm			Not Applicable						
Ammonia	50ppm	50ppm			Not Applicable						
Amines	5ppm	5ppm			Not Applicable						

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

Emission Point Reference Number: *A2-2*

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
Carbon Monoxide Nitrogen Dioxide Non Methane Hydrocarbons	Not Available	Not Available	Not Available	Not Available							

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	
A2-3	Diesel Generator	Diesel oil	Not Available	Not Available	Not Available	Not Applicable

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.

ATTACHMENT E.2 EMISSIONS TO SURFACE WATERS

Emissions to surface water are discussed in Section 3.4 Hydrology of the EIS. The existing surface water emission points SW1 and SW2 and monitoring locations at the point of discharge, will be retained as the proposed emission points SW1 and SW2 for this application. Emissions to surface water will comprise of uncontaminated stormwater from the hardstanded areas of the site only. All leachate generated on site will be captured in two leachate storage tanks in the tipping and curing building and contents will either be re-used for the composting process or be tankered off site as required and disposed of with an approved waste contractor.

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

Emission Point:

Emission Point Ref. N^{o}:	SW1
Source of Emission:	Stormwater
Location :	Northeast of facility
Grid Ref. (10 digit, 5E,5N):	166157E, 102782N
Name of receiving waters:	River Creegh
Flow rate in receiving waters:	Not Available $m^3.sec^{-1}$ Dry Weather Flow Not Available $m^3.sec^{-1}$ 95%ile flow
Available waste assimilative capacity:	Not Available kg/day

Emission Details:

(i) Volume to be emitted			
Normal/day	$75m^3$	Maximum/day	$75m^3$
Maximum rate/hour	$10m^3$		

(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)	60 min/hr 24 hr/day 365 day/yr

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

Emission Point:

Emission Point Ref. N^{o}:	SW2
Source of Emission:	Stormwater
Location :	Southeast of facility
Grid Ref. (10 digit, 5E,5N):	165874E, 102800N
Name of receiving waters:	River Creegh
Flow rate in receiving waters:	Not Available $m^3.sec^{-1}$ Dry Weather Flow Not Available $m^3.sec^{-1}$ 95%ile flow
Available waste assimilative capacity:	Not Available kg/day

Emission Details:

(i) Volume to be emitted			
Normal/day	$75m^3$	Maximum/day	$75m^3$
Maximum rate/hour	$10m^3$		

(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)	60 min/hr 24 hr/day 365 day/yr

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

Emission point reference number : SW1

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[1] (mg/l)	kg/day[2]	kg/year	
pH	Not Available	Not Available	Not Available	Not Available	Not Available	7.5	Not Available	Not Available	Not Available
Conductivity (µS/cm)	Not Available	Not Available	Not Available	Not Available	Not Available	1276	Not Available	Not Available	Not Available
COD(mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	86	Not Available	Not Available	Not Available
BOD(mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	37	Not Available	Not Available	Not Available
Ammonia as N (mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	3.5	Not Available	Not Available	Not Available
Suspended Solids (mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	70	Not Available	Not Available	Not Available
Total Phosphorous (mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	0.44	Not Available	Not Available	Not Available
Oils/Fats/Greases (mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	7	Not Available	Not Available	Not Available
Mineral Oils (µg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	<10	Not Available	Not Available	Not Available
DRO'S (µg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	<10	Not Available	Not Available	Not Available

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

Emission point reference number : SW2

[1] Grab sample July 2008
[2] There is no flow meter on the discharge. The max flow 75m^3 is not representative of lesser normal daily flows.

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[3] (mg/l)	kg/day[4]	kg/year	
pH	Not Available	Not Available	Not Available	Not Available	Not Available	7.2	Not Available	Not Available	Not Available
Conductivity (µS/cm)	Not Available	Not Available	Not Available	Not Available	Not Available	1184	Not Available	Not Available	Not Available
COD(mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	42	Not Available	Not Available	Not Available
BOD(mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	3	Not Available	Not Available	Not Available
Ammonia as N (mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	0.52	Not Available	Not Available	Not Available
Suspended Solids (mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	40	Not Available	Not Available	Not Available
Total Phosphorous (mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	0.43	Not Available	Not Available	Not Available
Oils/Fats/Greases (mg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	30	Not Available	Not Available	Not Available
Mineral Oils (µg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	<10	Not Available	Not Available	Not Available
DRO'S (µg/L)	Not Available	Not Available	Not Available	Not Available	Not Available	<10	Not Available	Not Available	Not Available

[3] Grab sample July 2008
[4] There is no flow meter on the discharge. The max flow 75m^3 is not representative of lesser normal daily flows.

ATTACHMENT E.4 EMISSIONS TO GROUNDWATER

Emission to groundwater is discussed in Section 3.5 Hydrogeology of the EIS. The existing groundwater emission points GWI at the point of discharge from the wastewater treatment system to the percolation area, will be retained as the proposed emission point GW1 for this application. Only domestic wastewater is treated in the system.

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

Emission Point or Area:

Emission Point/Area Ref. Nº:	GW1
Emission Pathway: (borehole, well, percolation area, soakaway, landspreading, etc.)	Percolation area
Location :	Southeast corner of facility
Grid Ref. (10 digit, 5E,5N):	165894E, 102777N
Elevation of discharge: (relative to Ordnance Datum)	37.75m OD
Aquifer classification for receiving groundwater body:	Locally important bedrock aquifer, moderately productive in local zones (LI)
Groundwater vulnerability assessment (including vulnerability rating):	High to Extreme (H-E)
Identity and proximity of groundwater sources at risk (wells, springs, etc):	No wells recorded on the GSI database for the area
Identity and proximity of surface water bodies at risk:	Tributary of River Creegh located 0.14km from south of the facility and River Creegh located 0.8km from the north of the facility

Emission Details:

(i) Volume to be emitted			
Normal/day	0.5m^3	Maximum/day	0.5m^3
Maximum rate/hour	0.03m^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)	60 min/hr 15 hr/day 306 day/yr

E.5 NOISE EMISSIONS

The facility has not assessed the equipment on site in terms of noise emissions.

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		
Not Available	Not Available	Not Available	Not Available	Not Available									Not Available	Not Available

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

E.6.1 BIRD CONTROL

Site operations consist of the receipt of domestic, commercial, industrial and construction and demolition waste which will be deposited within the dry recyclables building, wetwaste building and Biostabilisation Plant, skip dropdown area or glass bunkers only. All waste tipped will only be carried out indoors. Waste operations on site ensure that waste (i.e. either in sealed containers or covered) is never exposed and as such non food source is readily available for localised bird populations. Compostable materials will be tipped within the enclosed building so access by birds and other scavanagers into the building will be difficult. In addition, all putrescible materials will be processed within 24 hours arriving on site. Should compostable waste be stored overnight in the Biostabilisation building, the material will be covered with 15-20 cm of wood chop or screening overs to create a barrier to birds. Once materials are processed at the end of the day, empty tipping bunkers and the tipping floor are scrapped clean so no residual material remains. As a result, it is considered that bird control is not necessary at this facility.

E.6.2 DUST CONTROL

The site is designed to minimise the potential for dust generation during site operations with the introduction of extensive hardstanding areas to the facility. During dry periods dust suppression methods are employed on a routine basis. The waste delivery vehicles will be free from debris that could generate dust.

However, during the processes carried out in the Biostabilisation Plant, dust and bioaerosols can be generated when materials are agitated during the mixing and blending process within the tipping and receiving building, when materials are removed from the tunnels and placed onto the aerated static pile curing system, when materials are turned in the curing building, and when the finished compost is screened.

There has been a lot of concern about dust and bioaerosols associated with composting facilities and their potential impact on public health, especially on people who live near or work at a composting facility. First and foremost, as documented by numerous regulatory agencies (including the U.S EPA), it is now recognised that *composting facilities **do not** pose any unique endangerment to the health and welfare of the general public*. Moreover, where worker health has been studied, for periods of up to ten years on composting sites, no significant adverse health impacts have been found.

Nevertheless, the issue of bioaerosols remains contentious and applicant has consequently designed a system that minimises dust and bioaerosol generation through the use of appropriate technology and proper management, including the following:

- Activities likely to generate dust, such as tipping, feedstock mixing, pile formation and turning, and final screening would take place within a building and therefore would not be subject to wind and be transported off site to create a problem.
- Initially composting materials are enclosed within tunnels and not exposed to the outdoor environment.
- Materials are not turned during the in-vessel composting process, which reduces the release of dust and bioaerosols.
- All process air from the tunnels and aerated static pile curing system is pushed through a wet scrubber and biofilter so that all dust and any bioaerosols that are potentially generated can be filtered out of the process air prior to release to the environment.
- Close monitoring and adjustment of moisture avoids excessive dust generation during turning in the aerated static pile curing building and during screening of the finished compost product.
- All air from the tipping and curing buildings would be collected for treatment by a wet scrubber and biofilter to remove all dust and bioaerosols prior to release to the environment.

E.6.3 Fire Control

There is no fire hydrant at the facility or mains water supply. Clean firewater is retained in a fire truck for the facility with a capacity of 800 litres in addition to a 30,000 litre tank adjacent to the west face of the dry recyclables building which collects roof water. The facility currently does not have a contaminated firewater retention lagoon or tank, however it is envisaged this will be addressed when a Firewater Risk Assessment is conducted by external suitably qualified consultants. Fire extinguishers are located at various locations around the facility and routinely maintained.

The following measures will be implemented to deal with any fires at the facility: -

- Fire extinguishers will be strategically located on-site.
- Training of employees in fire prevention and control.
- Prominent posting of emergency response contact numbers (fire, Gardai, ambulance and other agencies).
- No smoking signs are displayed on site.
- All waste stored at the facility will be stored within the recycling building or stored in covered/sealed containers.

E.6.4 Litter Control

The control measures in place at Clean (Irl) Refuse & Recycling Ltd to prevent the escape of litter from the facility.

- Waste handling operations on the site ensure that waste is never left in the open air uncovered and as such the potential for litter escape is minimal. All recycling and tipping operations are conducted within the recycling plants and all compacted waste is continuously stored within sealed containers and all temporary stored skips outside the plant are covered.

- A daily litter patrol of the site perimeter and access road is undertaken. Where the escape of litter has occurred it is immediately collected and returned to the site.

E.6.5 Traffic Control

Traffic associated to site activities is discussed in detail in Chapter 3.8 of the EIS.

E.6.6 Vermin Control

Pest control measures undertaken at the facility presently consist of setting of poison by an independent specialist pest control company, throughout the site. Fly nuisance is minimised by the rapid removal of degradable waste off-site, the washing of the floor of the Recycling Building with disinfectant and the covering of all compacted waste and ensuring all skips are kept empty. Compostable materials will be tipped within the enclosed building so access by vermin into the building will be difficult. In addition, all putrescible materials will be processed within 24 hours arriving on site. Should compostable waste be stored overnight in the Biostabilisation building, the material will be covered with 15-20 cm of wood chop or screening overs to create a barrier to birds. Once materials are processed at the end of the day, empty tipping bunkers and the tipping floor are scrapped clean so no residual material remains.

E.6.7 Road Cleansing

The entire site will be covered with concrete and will be routinely cleaned. Therefore the potential for the generation of mud is eliminated. During the routine inspections for litter, an inspection of the access road and the facility will be inspected for mud deposition, especially during periods of wet weather. Any mud will be removed through the washing of the area.

F.1 EMMISIONS AND ABATEMENT

F.1.1 Emissions and Abatement to Atmosphere includes both odour scrubber and biofilter and control is discussed in Section 2.3.2.1 Project Description of the EIS.

F.1.2 Emissions and Abatement to Surface Water includes two oil/silt interceptors and control is discussed in Section 3.4 Hydrology of the EIS.

F.1.3 Emissions and Abatement to Groundwater includes the wastewater treatment plant and the mini-platnium system and is discussed in Section 3.5 Hydrogeology of the EIS.

F.1 4 Tables for emissions are completed in overleaf.

TABLE F.1: ABATEMENT / TREATMENT CONTROL

Emission point reference number *: A2-1 (Biofilter)*

Control[1] parameter	Equipment[2]	Equipment maintenance	Equipment calibration	Equipment back-up
Biofilter Moisture Content (50-60%)	Not available	As per maintenance schedule	As per calibration schedule	On site spares
Biofilter Media Porosity	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Air flow	Not available	As per maintenance schedule	As per calibration schedule	Standy motor & blower for in-vessel tunnels Standby motor for curing building Standy motor for ventilation
Temperature prior to biofilter (30°C to 50°C)	Not available	As per maintenance schedule	As per calibration schedule	As required
pH wet scrubber	Not available	As per maintenance schedule	As per calibration schedule	As required
Constant flow of scrubber liquid	Not available	As per maintenance schedule	As per calibration schedule	As required

Control[1] parameter	Monitoring to be carried out[3]	Monitoring equipment	Monitoring equipment calibration
Moisture Biofilter	Daily & weekly inspections	Operator: visual & smell Process control system	Not Available
Air flow biofilter	Daily & weekly inspections	Operator: visual & smell Process control system Back pressure on blower	Not Available
Temperature prior to biofilter	Daily & weekly inspections	Operator: visual & smell Process control system	Not Available
pH wet scrubber	Daily & weekly inspections	Operator: visual & smell Process control system	Not Available
Constant flow of scrubber liquid	Daily & weekly inspections	Operator: visual & smell Process control system	Not Available

[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.1: ABATEMENT / TREATMENT CONTROL

Emission point reference number *: A2-2(Biomass Recovery Plant)*

Control[1] parameter	Equipment[2]	Equipment maintenance	Equipment calibration	Equipment back-up
Not available	Not available	Not available	Not available	Not available

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.1: ABATEMENT / TREATMENT CONTROL

Emission point reference number *: SW-1*

Control[1] parameter	Equipment[2]	Equipment maintenance	Equipment calibration	Equipment back-up
Silt	Bypass Separator	As required	Not applicable	Not applicable
Oil	Bypass Separator	As required	Not applicable	Not applicable

Control[1] parameter	Monitoring to be carried out[3]	Monitoring equipment	Monitoring equipment calibration
Silt	Weekly	Visual Inspection	Not Applicable
Oil	Weekly	Visual Inspection	Not Applicable

[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.1: ABATEMENT / TREATMENT CONTROL

Emission point reference number *: SW-2*

Control[1] parameter	Equipment[2]	Equipment maintenance	Equipment calibration	Equipment back-up
Silt	Bypass Separator	As required	Not applicable	Not applicable
Oil	Bypass Separator	As required	Not applicable	Not applicable

Control[1] parameter	Monitoring to be carried out[3]	Monitoring equipment	Monitoring equipment calibration
Silt	Weekly	Visual Inspection	Not Applicable
Oil	Weekly	Visual Inspection	Not Applicable

[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.1: ABATEMENT / TREATMENT CONTROL

Emission point reference number *: GW-1*

Control[1] parameter	Equipment [2]	Equipment maintenance	Equipment calibration	Equipment back-up
Tertiary Polishing	Mini-platnium	As required	Not applicable	Not applicable
Wastewater treatment	Puraflo	As required	Not applicable	Not applicable

Control[1] parameter	Monitoring to be carried out[3]	Monitoring equipment	Monitoring equipment calibration
Tertiary Polishing	Not Applicable	Not Applicable	Not Applicable
Wastewater treatment	Not Applicable	Not Applicable	Not Applicable

[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.

Attachments F2-F9

Attachments F2-F9

The following drawings are included in this attachment:

- Drawing C(IRL)WL-06 illustrates the existing monitoring locations.
- Drawing C(IRL)WL-07 illustrates the proposed monitoring locations for this application.

Environmental monitoring and sampling will be conducted by suitable qualified monitoring personnel in accordance with standard sampling procedures. Analysis of samples will be performed by accredited laboratories in accordance with current standards. The monitoring locations provided in Attachments F2-F9 are also the sampling locations.

Attachment F.2 Air

F.2.1 The monitoring locations for emissions from the proposed biofilter is shown below.

LOCATION OF BIOFILTER MONITORING		
Proposed Location	**National Grid Reference**	**Geographical location**
A2-1	Not Available	South East of Facility

Note: The grid reference for biofilter emission will be submitted to the EPA subsequent to this application- the location is estimated on the relevant drawing

TABLE F.2 to F.8 ***Emission Point Reference No(s).:*** A2-1

Parameter	Monitoring frequency	Accessibility of Sampling Points
Ammonia	Biannually	Not Available
Metcaptans	Biannually	Not Available
Hydrogen Sulphide	Biannually	Not Available
Amines	Biannually	Not Available
TVCs[1]	Biannually	Not Available
Bioaerosols (bacteria & aspergillus fumigatus)	Annually	Not Available

[1]TVC:Total Viable Counts

F.2.2 The monitoring location for the emission from the Biomass Recovery Plant are shown below:

LOCATION OF BIOMASS RECOVERY PLANT STACK		
Proposed Location	**National Grid Reference**	**Geographical location**

A2-2	Not Available	South East of Facility

Note: the grid reference for biofilter emissions will be submitted to the EPA subsequent to this application- the location is estimated on the relevant drawing

TABLE F.2 to F.8 ***Emission Point Reference No(s). :*** A2-2

Parameter	Monitoring frequency	Accessibility of Sampling Points
NOx	Annually	Not Available
CO	Annually	Not Available
NMHC	Annually	Not Available

The emissions to air (AE-1 and AE-2) locations are illustrated on individual drawing C(IRL)WL-10 included in this Attachment.

F.2.3 The fugitive emission from the site include dust, there is no proposed monitoring for the woodchip boiler as this in not related to waste processing activities.

LOCATION OF DUST MONITORING MEASUREMENTS			
Proposed Location	**National Grid Reference**	**Location Type**	**Geographical location**
D1	102716N,166230E	Boundary	North boundary
D2	102794N,166139E	Boundary	Northeastern boundary
D3	102679N,166010E	Boundary	Western boundary
D4	102731N,165869E	Boundary	Eastern boundary
D5	102804N,166012E	Boundary	Southern boundary

The emissions to air (Dust D1-D5) locations are illustrated on individual drawing C(IRL)WL-26 included in this Attachment.

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

Monitoring Point Reference No : D1-D5

Parameter	Monitoring frequency	Accessibility of Sampling point
Dust	Biannually	Accessible

Attachment F.3 SURFACE WATER

The monitoring locations for emissions from the proposed surface water are shown below.

LOCATION OF SURFACE WATER MONITORING		
Proposed Location	**National Grid Reference**	**Geographical location**
SW1	102783N, 166157E	South East of Facility
SW2	102801N, 165874E	North East of Facility

The emissions to surface water (SW1 and SW2) locations are illustrated on individual drawing C(IRL)WL-08 included in this Attachment.

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

Emission Point Reference No(s). : SW1

Parameter	Monitoring frequency	Accessibility of Sampling Points
pH (pH Units)	Quarterly	Outlfall accessible
Conductivity (µS/cm)	Quarterly	Outlfall accessible
COD(mg/L)	Quarterly	Outlfall accessible
BOD(mg/L)	Quarterly	Outlfall accessible
Ammonia as N(mg/L)	Quarterly	Outlfall accessible
Suspended Solids (mg/L)	Quarterly	Outlfall accessible
Total Phosphorous (mg/L)	Quarterly	Outlfall accessible
Oils/Fats/Greases (mg/L)	Quarterly	Outlfall accessible
Mineral Oils (µg/L)	Quarterly	Outlfall accessible
DRO'S (µg/L)	Quarterly	Outlfall accessible

Emission Point Reference No(s). : SW2

Parameter	Monitoring frequency	Accessibility of Sampling Points
pH (pH Units)	Quarterly	Outlfall accessible
Conductivity (µS/cm)	Quarterly	Outlfall accessible
COD(mg/L)	Quarterly	Outlfall accessible
BOD(mg/L)	Quarterly	Outlfall accessible
Ammonia as N(mg/L)	Quarterly	Outlfall accessible
Suspended Solids (mg/L)	Quarterly	Outlfall accessible
Total Phosphorous (mg/L)	Quarterly	Outlfall accessible
Oils/Fats/Greases (mg/L)	Quarterly	Outlfall accessible
Mineral Oils (µg/L)	Quarterly	Outlfall accessible
DRO'S (µg/L)	Quarterly	Outlfall accessible

F.4 SEWER

There are no emissions to sewer from the facility.

F.5 Groundwater

The monitoring locations for emissions from the proposed groundwater are shown below.

LOCATION OF GROUND WATER MONITORING		
Proposed Location	**National Grid Reference**	**Geographical location**
GW1	102777N,165874E*	Southeast of facility

*The location of the percolation area may be altered and resubmitted subsequent to this application.

The emission to ground water location is illustrated on individual drawing C(IRL)WL-09 included in this Attachment.

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

Emission Point Reference No(s). : GW1

Parameter	Monitoring frequency	Accessibility of Sampling Points
pH	Biannually	Sampling Chamber
COD(mg/L)	Biannually	Sampling Chamber
BOD(mg/L)	Biannually	Sampling Chamber
Suspended Solids (mg/L)	Biannually	Sampling Chamber

F.6 NOISE

The monitoring locations for the proposed noise measurements are shown below.

LOCATION OF NOISE MONITORING MEASUREMENTS			
Proposed Location	**National Grid Reference**	**Location Type**	**Geographical location**
N1	102775N, 166146E	Internal	Clean (Irl) Car park at North of Facility
N2	102720N, 166217E	Boundary	North Boundary of Facility
N3	102678N, 165872E	Boundary	South West Corner of Facility
N4	102795N, 165866E	Boundary	South East Corner of Facility
N6	102665N, 166078E	External	Noise Sensitive Location Occupied Dwelling West of Facility *Corner of House*

The noise emissions (N1-N5) locations are illustrated on individual drawing C(IRL)WL-25 included in this Attachment.

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

Emission Point Reference No(s). : N1-N5

Parameter	Monitoring frequency	Accessibility of Sampling Points
Noise	Biannually	Accessible

F.7 METEOROLOGICAL DATA

The facility does not have any existing system for logging meteorological conditions. A wind sock will be in place to indicate wind direction on site. With the proposed development of the facility, a meteorological station will be used to monitor meteorological conditions for the site in Cree.

G.1 RAW MATERIALS AND PRODUCT

The raw materials used at the site are limited to hydrocarbons:

- Motor Diesel
- Agricultural·Motor·Diesel·
- Hydraulic Oil
- Engine Oil

G.2 ENERGY EFFICIENCY

The facility used the following energy sources in 2007:

- Electricity €9,840
- Generator Diesel €15,600 (6,1547 litres p.a.)

The proposed Biomass Recovery Plant will be using clean wood and paper products to generate renewable energy to meet the energy requirements of the site to offsite diesel consumption.

A domestic wood burner is used for space heating and hot water to reduce energy consumption from non-renewable resources.

An energy audit has not, as yet, been carried out at the facility. The facility is proposing to review the efficiency of the existing waste processing equipment with the proposed upgrade.

H.1 WASTE TYPES -

H.1.1
Types of Biodegradable Materials to be Potentially Accepted and Treated by the Biostabilisation Plant

EWC Code	Material Description
02 01 03	Plant tissue waste
02 01 06	Animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off site
02 01 07	Wastes from forestry
02 02 04	Sludges from on-site effluent treatment
02 03	Wastes from the fruit, vegetable, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extraction production; molasses preparation and fermentation
02 04	Wastes from sugar processing
02 05	Wastes from the dairy products industry
02 06	Wastes from the baking and confectionery industry
02 07	Wastes from the production of alcoholic and non-alcohol beverages (except coffee, tea and cocoa)
03 01	Wastes from wood processing and the production of panels and furniture
03 03 01	Waste bark and wood
15 01 01	Paper and cardboard packaging
15 01 03	Wooden packaging
17 02 01	Wood
19 06 04	Digestate from anaerobic treatment of municipal waste
19 06 06	Digestate from anaerobic treatment of animal and vegetable waste
19 08 05	Sludges from treatment of urban waste water [Note 1]
19 08 12	Sludges from biological treatment of industrial waste water other than those listed in 19 08 11 [Note 1]
19 08 14	Sludges from other treatment of industrial waste water other than those listed in 19 08 13 [Note 1]
19 12 01	Paper and cardboard
19 12 07	Wood other than that listed in 19 12 06
20 01	Separately collected fractions of municipal waste
20 01 01	Paper and cardboard
20 01 08	Biodegradable kitchen and canteen waste [Note 2]
20 01 38	Wood other than that mentioned in 20 01 37
20 02	Garden and park wastes (including cemetery waste)
20 02 01	Biodegradable waste [Note 3]
20 03 01	Mixed municipal waste [Note 4]
20 03 02	Waste from markets
20 03 03	Street cleaning residuals [Note 5]
20 03 06	Waste from sewage cleaning*****

[Note 1] Municipal and industrial biosolids will only be accepted by the facility if testing results show that the sludges do not contain significant quantities of heavy metals or toxic chemicals that would prevent the final compost from attaining the highest standards for compost (now begin proposed by the EPA in consultation with Cré, Composting Association of Ireland Teo). [Note 1]

[Note 2] Catering waste from residential and commercial sources that include animal by-products and cooked or uncooked food materials.

[Note 2] The facility will process mixed waste fines separately from source-separated or centrally sorted mixed commercial biodegradable waste from shops, supermarkets, food distribution outlets, and institutional

premises such as colleges, canteens etc., as long as it meets the acceptance standards of the facility for physical contaminants (glass, metal,

Note 4 The facility will process a biodegradable rich "fine" fraction derived from mechanically processed mixed waste materials.

Note 5 The facility will only accept street cleaning residuals and waste from sewage cleaning if the materials do not exceed 5% physical contaminants (glass, plastics, metal) in the street sweepings and if either do not exceed heavy metal or chemical contaminants that would jeopardize the final compost's ability to pass the Irish industry standard for compost quality (soon to be released by EPA and Cré).

H.1.2
Existing and Proposed Waste Types

EWC code	Material Description
15 01 01	Paper and cardboard packaging
15 01 02	Plastic packaging
15 01 03	Wooden packaging
15 01 04	Metallic Packaging
15 01 04	Metallic Packaging
15 01 07	Glass Packaging
16 06 01*	Lead Batteries
16 02 13**	Discarded equipment containing hazardous components ([16]) other than those mentioned in 16 02 09 to 16 02 12
16 02 14	Discarded equipment other than those mentioned in 16 02 09 to 16 02 13
17 02 01	Wood
17 02 03	Plastic from construction and demolition waste (Non-packaging)
17 04 02	Aluminum
17 04 01	Copper, brass, bronze
17 04 11	Cables other than those mentioned in 17 04 10
17 04 07	Mixed Metals
17 01 02	Bricks
17 09 04	Mixed construction and demolition waste other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
17 01 07	Mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
19 12 12	Other waste (including mixtures or materials) from mechanical treatment of wastes others than those mentioned in 19 12 11
20 01 40	Metals (household)
20 01 21*	Fluorescent Tubes and other mercury-containing waste
20 01 08	Biodegradable kitchen and canteen waste
20 01 01	Paper and cardboard
20 01 25	Edible Oil and Fat
20 01 39	Plastic
20 01 38	Wood other than those mentioned in 20 01 37
20 01 35*	Discarded electric and electronic equipment other than those mentioned in 20 02 21 to 20 01 23 containing hazardous components ([21])
20 01 36	Discarded electric and electronic equipment other than those mentioned in 20 01 21 to 20 01 35
20 03 01	Mixed municipal waste

H.1.3
Possible waste types from End of Life Vehicle Processing

EWC code	Material Description
13 07 01*	Fuel oil and diesel
13 07 02*	Petrol
13 07 03*	Other fuels (including mixtures)
16 01 03	End-of-life tyres
16 01 04*	End-of-life vehicles
16 01 06	End-of-life tyres, containing neither liquids or other hazardous components
16 01 07*	Oil filters
16 01 08*	Components containing mercury
16 01 09*	Components containing PCB's
16 01 10*	Explosive components (for example air bags)
16 01 11*	Brake pads containing asbestos
16 01 12	Brake pads other than those contained in 16 01 11
16 01 13*	Brake fluids
16 01 14*	Antifreeze fluids containing dangerous substances
16 01 15	Antifreeze fluids other than those mentioned in 16 01 14
16 01 16	Tanks for liquefied gas
16 01 17	Ferrous metal
16 01 18	Non-ferrous metal
16 01 19	Plastic
16 01 20	Glass
16 01 21*	Hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14
16 01 22	Components not otherwise specified
16 01 99	Wastes not otherwise specified

Any waste marked with (*) is considered to be hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1 (5) of that Directive applies.

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)
Sludges from oil/water interceptors	13 5 03*	Silt/Oil Bypas Separator priorSW1 and SW2 discharge	As required	As Required	Not Applicable	Not Applicable	WWTP
Waste Hydraulic Oils	13 01*	Waste oils from plant and machinery	0.3 tonnes/month	Not Applicable	Not Applicable	Atlas Environmental	Not Applicable

[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]	Off-site Recovery, reuse or recycling	Off-site Disposal
			Tonnes / month	m^3 / month	(Method & Location)	(Method, Location & Undertaker)	(Method, Location & Undertaker)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

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

H.2 WASTE ACCEPTANCE PROCEDURES

The facility governs all waste acceptance procedures under Yard Activities procedure CIR20-100 which is included in previous Attachment C.2 Environmental Management Systems.

H.3 WASTE HANDLING PROCEDURES

The facility will handle all waste under Yard Activities procedure CIR20-100 and Biostabilisation Plant Operation CIR20-128 which is included in previous Attachment C.2 Environmental Management Systems. The EMS also includes process descriptions for waste streams on site. Attachment 4 of the EIS outlines the schematics of the proposed waste processes for the site.

Attachment D.2 Facility Operation provides details on the Sections of the EIS referred in relation to the activities carried out at the facility.

I.1 ASSESSMENT OF ATMOSPHERIC EMISSIONS

An assessment of the atmospheric emissions is outlined in the EIS Chapter 3.6 air and details of emissions in Attachment E.1 of this application.

I.2 ASSESSMENT OF IMPACT ON RECEIVING SURFACE WATER

The impact on receiving surface waters has been addressed in EIS Chapter 3.4, Hydrology.

Table I.2 (i) is shown overleaf.

Table I.2(i) SURFACE WATER QUALITY

(Sheet 1 of 2) Monitoring Point/ Grid Reference: ___SW1 102782N, 166157E

Parameter	Results (mg/l)				Sampling method[2] (grab, drift etc.)	Normal Analytical Range[2]	Analysis method / technique
	Date	Date	Date	Date			
pH				*6 – 9*	grab		APHA standard Methods
Temperature				Not applicable	grab		APHA standard Methods
Electrical conductivity EC				1000µS/cm			APHA standard Methods
Ammoniacal nitrogen NH_4-N				0.82mg/l	grab		APHA standard Methods
Chemical oxygen demand				40mg/l	grab		APHA standard Methods
Biochemical oxygen demand				5mg/l	grab		APHA standard Methods
Dissolved oxygen DO				Not applicable	grab		APHA standard Methods
Calcium Ca				Not applicable	grab		APHA standard Methods
Cadmium Cd				Not applicable	grab		APHA standard Methods
Chromium Cr				Not applicable	grab		APHA standard Methods
Chloride Cl				Not applicable	grab		APHA standard Methods
Copper Cu				Not applicable	grab		APHA standard Methods
Iron Fe				Not applicable	grab		APHA standard Methods

Lead Pb				Not applicable	grab		APHA standard Methods
Magnesium Mg				Not applicable	grab		APHA standard Methods
Manganese Mn				Not applicable	grab		APHA standard Methods
Mercury Hg				Not applicable	grab		APHA standard Methods

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				Not applicable	grab		APHA standard Methods
Potassium K				Not applicable	grab		APHA standard Methods
Sodium Na				Not applicable	grab		APHA standard Methods
Sulphate SO_4				Not applicable	grab		APHA standard Methods
Zinc Zn				Not applicable	grab		APHA standard Methods
Total alkalinity (as $CaCO_3$)				Not applicable	grab		APHA standard Methods
Total organic carbon TOC				Not applicable	grab		APHA standard Methods
Total oxidised nitrogen TON				Not applicable	grab		APHA standard Methods
Nitrite NO_2				Not applicable	grab		APHA standard Methods
Nitrate NO_3				Not applicable	grab		APHA standard Methods
Faecal coliforms (/100mls)				Not applicable	grab		APHA standard Methods
Total coliforms (/100mls)				Not applicable	grab		APHA standard Methods
Phosphate PO_4				0.03mg/l	grab		APHA standard Methods

Table I.2(i) SURFACE WATER QUALITY

(Sheet 1 of 2) Monitoring Point/ Grid Reference: ___SW2 102800N, 165874E

Parameter	Results (mg/l)				Sampling method[2] (grab, drift etc.)	Normal Analytical Range[2]	Analysis method / technique
	Date	Date	Date	Date			
pH				*6 – 9*	grab		APHA standard Methods
Temperature				Not applicable	grab		APHA standard Methods
Electrical conductivity EC				1000µS/cm			APHA standard Methods
Ammoniacal nitrogen NH_4-N				0.82mg/l	grab		APHA standard Methods
Chemical oxygen demand				40mg/l	grab		APHA standard Methods
Biochemical oxygen demand				5mg/l	grab		APHA standard Methods
Dissolved oxygen DO				Not applicable	grab		APHA standard Methods
Calcium Ca				Not applicable	grab		APHA standard Methods
Cadmium Cd				Not applicable	grab		APHA standard Methods
Chromium Cr				Not applicable	grab		APHA standard Methods
Chloride Cl				Not applicable	grab		APHA standard Methods
Copper Cu				Not applicable	grab		APHA standard Methods
Iron Fe				Not applicable	grab		APHA standard Methods

Lead Pb				Not applicable	grab		APHA standard Methods
Magnesium Mg				Not applicable	grab		APHA standard Methods
Manganese Mn				Not applicable	grab		APHA standard Methods
Mercury Hg				Not applicable	grab		APHA standard Methods

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				Not applicable	grab		APHA standard Methods
Potassium K				Not applicable	grab		APHA standard Methods
Sodium Na				Not applicable	grab		APHA standard Methods
Sulphate SO_4				Not applicable	grab		APHA standard Methods
Zinc Zn				Not applicable	grab		APHA standard Methods
Total alkalinity (as $CaCO_3$)				Not applicable	grab		APHA standard Methods
Total organic carbon TOC				Not applicable	grab		APHA standard Methods
Total oxidised nitrogen TON				Not applicable	grab		APHA standard Methods
Nitrite NO_2				Not applicable	grab		APHA standard Methods
Nitrate NO_3				Not applicable	grab		APHA standard Methods
Faecal coliforms (/100mls)				Not applicable	grab		APHA standard Methods
Total coliforms (/100mls)				Not applicable	grab		APHA standard Methods
Phosphate PO_4				0.03mg/l	grab		APHA standard Methods

I.3 ASSESSMENT OF IMPACT OF SEWAGE DISCHARGE

There is no discharge from the facility to sewer.

I.4 ASSESSMENT OF IMPACT OF GROUND/GROUNDWATER EMISSIONS

The impact on receiving surface waters has been addressed in EIS Chapter 3.5, Hydrogeology.

Table I.4 (i) is shown overleaf.

Table I.4(i) GROUNDWATER QUALITY

(Sheet 1 of 2) Monitoring Point/ Grid Reference: GW1 102777N, 165874E

Parameter	Results (mg/l)				Sampling method (composite etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
pH				6-9	Dipper		APHA Standard Methods
Temperature				Not applicable	Not applicable		Not applicable
Electrical conductivity EC				Not applicable	Not applicable		Not applicable
Ammoniacal nitrogen NH_4-N				Not applicable	Not applicable		Not applicable
Dissolved oxygen DO				Not applicable	Not applicable		Not applicable
Residue on evaporation (180°C)				Not applicable	Not applicable		Not applicable
Calcium Ca				Not applicable	Not applicable		Not applicable
Cadmium Cd				Not applicable	Not applicable		Not applicable
Chromium Cr				Not applicable	Not applicable		Not applicable
Chloride Cl				Not applicable	Not applicable		Not applicable
Copper Cu				Not applicable	Not applicable		Not applicable
Cyanide Cn, total				Not applicable	Not applicable		Not applicable
Iron Fe				Not applicable	Not applicable		Not applicable
Lead Pb				Not applicable	Not applicable		Not applicable
Magnesium Mg				Not applicable	Not applicable		Not applicable
Manganese Mn				Not applicable	Not applicable		Not applicable
Mercury Hg				Not applicable	Not applicable		Not applicable
Nickel Ni				Not applicable	Not applicable		Not applicable
Potassium K				Not applicable	Not applicable		Not applicable
Sodium Na				Not applicable	Not applicable		Not applicable

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				Not applicable	Not applicable		Not applicable
Sulphate SO_4				Not applicable	Not applicable		Not applicable
Zinc Zn				Not applicable	Not applicable		Not applicable
Total alkalinity (as $CaCO_3$)				Not applicable	Not applicable		Not applicable
Total organic carbon TOC				Not applicable	Not applicable		Not applicable
Total oxidised nitrogen TON				Not applicable	Not applicable		Not applicable
Arsenic As				Not applicable	Not applicable		Not applicable
Barium Ba				Not applicable	Not applicable		Not applicable
Boron B				Not applicable	Not applicable		Not applicable
Fluoride F				Not applicable	Not applicable		Not applicable
Phenol				Not applicable	Not applicable		Not applicable
Phosphorus P				Not applicable	Not applicable		Not applicable
Selenium Se				Not applicable	Not applicable		Not applicable
Silver Ag				Not applicable	Not applicable		Not applicable
Nitrite NO_2				Not applicable	Not applicable		Not applicable
Nitrate NO_3				Not applicable	Not applicable		Not applicable
Faecal coliforms (/100mls)				Not applicable	Not applicable		Not applicable
Total coliforms (/100mls)				Not applicable	Not applicable		Not applicable
Water level (m OD)				Not applicable	Not applicable		Not applicable

I.5 GROUND AND/OR GROUNDWATER CONTAMINATION

Soil sampling was conducted at the facility to investigate if there was any contamination. Soils and Geology is discussed in EIS Chapter 3.3.

I.6 NOISE IMPACT

The noise impact has been addressed in EIS Chapter 3.7, Noise.

Table I.6 (i) is shown below.

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:	102775N, 166135E	55dB(A)		
Location 2:	102728N, 166214E	55dB(A)		
Location 3:	102678N, 165866E	55dB(A)		
Location 4:	102784N, 165866E	55dB(A)		
2. NOISE SENSITIVE LOCATIONS				
Location 1:	102665N,166078E	55dB(A)		
Location 2:				
Location 3:				
Location 4:				

NOTE: All locations should be identified on accompanying drawings.

Drawing C(IRL)WL-25 shows noise monitoring locations.

I.7 ASSESSMENT OF ECOLOGICAL IMPACTS & MITIGATION MEASURES

Ecological impacts and mitigation measures are discussed in Chapter 3.2, Flora and Fauna of the EIS.

J. ACCIDENT PREVENION & EMERGENCY RESPONSE

The existing emergency response procedure CIR20-103 in Attachment C.2 in place defines the appropriate actions to be taken in response to potential emergency situations (e.g. fire) occurring at the site and including environmental accidents and or emergencies. These measures will be designed to:

- Ensure maximum protection for on-site personnel
- Ensure that a significant hazard to the general public is prevented
- Minimise impact on the receiving environment
- Reduce impact on site operations

Implementation of emergency procedures will involve appropriate staff training. The emergency procedures are followed by all personnel (including visitors) on site.

K. REMEDIATION, DECOMMISSIONING, RESTORATION AND AFTERCARE

The facility plans to operate indefinitely. In the event of a cessation of waste processing activities all temporarily stored waste material will be removed from the site. All equipment will be depolluted where relevant and removed and either recycled, sold on for re-use or disposed of with an approved waste contractor. It is likely that the processing buildings will be re-used for an alternative activity and demolition would be avoided. An Environmental Liabilities Risk Assessment will be prepared for the site on request by the EPA and submitted accordingly.

L.1 STATUTORY REQUIREMENTS

Section 40 (4) of the Waste Management Act 1996, amended by the Protection of the Environment Act 2003, sets out specific criteria of which the Agency must be satisfied before it will consider the granting of a licence:

(a) any emission from the recovery or disposal activity in question ('the activity concerned') will not result in the contravention of any relevant standard, including any standard for an environmental medium, or any relevant emission limit value, prescribed under any other enactment

Under the existing Waste Permit 002/07/WPT/CL and Licence to Discharge, Trade or Sewage Effluent to Waters W.P. 162 emission limits in relation to noise, dust, groundwater and surface water have been stipulated and a monitoring programme is already well established. The facility submits environmental reports to Clare Co. Co. under the monitoring schedule. Clare Co. Co. also carry out an independent monitoring program of surface water discharges from the site to ensure the facility is compliant with the limits. On occasion exceedences have been recorded in relation to dust levels, surface water and noise levels at various locations and as a corrective action, mitigation measures have been put in place to prevent re-occurrence.

With the upgrade of the facility, emissions to surface water from the site will improve as the hardstanded area will be extended, noise will be reduced as C&D, skipdropdown, and timber shredding activities will be enclosed. All composting activities will be enclosed and carefully controlled from a process control room, and potential for pollutants such as leachate and bioaerosols will be mitigated with good environmental management practices in conjunction with BAT. An odour management plan will be put in place. Initiatives such as rain harvesting and generation of renewable energy from virgin wood and cardboard at the site, is an important step towards the facility being environmentally sustainable. The relevant standards for emissions from the site have been set out in individual chapters in Section 3 of the EIS.

(b) 'the activity concerned, carried on in accordance with such conditions as may be attached to the licence, will not cause environmental pollution'

The information provided in Application Form Sections H.1 – H.4 and Attachments I.1 – I.7, supported by Section 3 of the EIS, indicates the volumes of waste, the handling procedures for the waste and the mitigation measures undertaken to ensure there is no impact on sensitive receptors.

(bb) 'if the activity concerned involves the landfill of waste, the activity, carried on in accordance with such conditions, as may be attached to the licence, will comply with Council Directive 1999/31/EC on the landfill of waste'

No landfill activities take place at the facility.

(c) *the best available technology not entailing excessive cost will be used to prevent or eliminate or, where that is not practicable, to limit, abate or reduce an emission from the activity concerned*

The classes of activities under the Waste Management Acts 1996 to 2003 as detailed in Attachment B.7 will be governed by the BAT Guidance Note – Waste Sector (Transfer) of 2003 as produced by the Agency. Abatement measures are detailed in Attachment F.1.

(cc) the activity concerned is consistent with the objectives of the relevant waste management plan or the hazardous waste management plan, as the case may be, and will not prejudice measures taken or to be taken by the relevant local authority or authorities for the purpose of the implementation of any such plan

The Clare, Limerick, Kerry Waste Management Plan 2006 sets target for the region for the treatment of total waste arisings by 2013 at Recycling 45% Energy Recovery 41% Landfill Disposal 14%. Section 1 'need for the development' of the EIS considers regional and national policy and in conclusion, the proposed development is in line with the objectives of the waste management plan.

(d) *if the applicant is not a local authority, the corporation of a borough that is not a county borough, or the council of an urban district, subject to subsection (8), he or she is a fit and proper person to hold a waste licence*

Refer to Attachment L.2

(e) the applicant has applied with any requirements under section 53

The facility has not as yet completed an ELRA, however in the event of cessation of activities the facility will implement a closure plan and render the site environmentally benign. The facility is in a position to ensure that there is adequate financial provision in the event of any environmental known or unknown liabilities.

(f) energy will be used efficiently in the carrying on of the activity concerned,

It is proposed to generate electricity from renewable materials accepted to the site (virgin wood, cardboard, paper) to supply energy to the site with the potential to feed in surplus.

(*g*) *any noise from the activity concerned will comply with, or will not result in the contravention of, any regulations under section 106 of the Act of 1992,*

Noise generated on the site is managed to minimise any impact on noise sensitive locations. Activities will be enclosed and any engines will have noise abatement. The movement of vehicles and plant at the site is conducted under site management practices to reduce any potential nuisance from the site.

(h) necessary measures will be taken to prevent accidents in the carrying on of the activity concerned and, where an accident occurs, to limit its consequences for the environment,

Site activities are carried out under the procedures set out the facility's environmental management system. Employees are trained for the prevention of accident and also the rapid response to contain any such releases to the environment.

(i) necessary measures will be taken upon the permanent cessation of the activity concerned (including such a cessation resulting from the abandonment of the activity) to avoid any risk of environmental pollution and return the site of the activity to a satisfactory state.",

The facility will complete a fully-costed closure plan detailing the handling of residual materials, plant and waste. On cessation of activities, a structured plan to decommission all activities and render the site environmentally benign will be undertaken.

Attachment L.2 Fit and Proper Person

The Applicant (Clean (Irl) Refuse & Recycling Ltd) has never 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.t

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