Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Waste Licence Application Form

EPA Ref. Nº: *(Office use only)*	

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

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

Environmental Protection Agency
Application for a Waste Licence

WASTE MANAGEMENT ACTS 1996 to 2003

CONTENTS

INTRODUCTION

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

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

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

When it is found necessary, additional information may be provided on supplementary attachments which should be clearly cross referenced with the relevant sections in the main document.

While all sections in the application form may not be relevant to the activity concerned, the applicant should look carefully through all aspects of the form and provide the required information, in the greatest possible detail.

All maps/drawings/plans must be no larger than A3 size and scaled appropriately such that they are clearly legible. In exceptional circumstances, where A3 is considered inadequate, a larger size may be requested by the Agency.

Information supplied in this application, including supporting documentation will be put on public display and open to inspection by any person. Should the applicant consider information to be confidential, this information should be submitted in a separate enclosure bearing the legend " In the event that this information is deemed not to be held as confidential, it must be returned to .....". In the event that information is considered to be of a confidential nature, then the nature of this information, and the reasons why it is considered confidential (with reference to the " Access to Information on the Environment" Regulations) should be stated in the Application Form, where relevant.

It should be noted that it will not be possible to process or determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard.

CHECKLIST

Articles 12 and 13 of the Waste Management (Licensing) Regulations, 2004 (S.I. No. 395 of 2004) set out the information which must, in all cases, accompany a waste licence application. In order to ensure that the application fully complies with the legal requirements of Articles 12 and 13 of the 2004 Regulations, all applicants should **complete** the following.

In each case, refer to the attachment number(s) of your application which contain(s) the information requested in the appropriate sub-article.

Article 12(1) In the case of an application for a waste licence, the application shall -

(a) give the name, address and, where applicable, any telephone number and telefax of the applicant (and, if different, the operator of the facility concerned), the address to which correspondence relating to the application should be sent and, if the applicant or operator is a body corporate, the address of its registered office or principal office,

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	NOT APPLICABLE	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

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

LOCATION	NA	
CHECKED	**Applicant** ☐	**Official** ☐

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

LOCATION	NA	
CHECKED	**Applicant** ☐	**Official** ☐

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

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

(t) in the case of an activity which gives rise or could give rise to an emission into an aquifer containing the List I and II substances specified in the Annex to Council Directive 80/68/EEC of 17

December 1979, describe the existing or proposed arrangements necessary to give effect to Articles 3,4,5,6,7,8,9 and 10 of the aforementioned Council Directive,

LOCATION	See Section 12(1) of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section Non Technical Summary of the accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

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

LOCATION	See Section 1 of the Accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 1 of the Accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Section 1 of the Accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

(d) a copy of such plans (appropriately scaled and no larger than A3 size), including a site plan or plans and location map or maps, and

such other particulars, reports and supporting documentation as are necessary to identify and describe, as appropriate -
(i) the position of the notice in accordance with article 7,

LOCATION	See the Drawing 101 in Accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	Seethe Drawing 3 in Accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

LOCATION	See Drawing 3 of Accompanying Document	
CHECKED	**Applicant** ☒	**Official** ☐

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

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

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

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

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

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

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

PROCEDURES

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

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

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

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

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

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

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

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

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

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

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

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

- *All drawings submitted should be titled and dated.*
- *They should have a **unique reference number** and should be signed by a clearly identifiable person.*
- *They should indicate a scale and the **direction of north**.*
- *All drawings should, generally, be to a scale of between 1:20 to 1:500, depending upon the degree of detail needed to be shown and the size of the facility. Drawings delineating the boundary can be to a smaller scale of between 1:1000 to 1:10560, but must clearly and accurately present the required level of detail. Drawings showing the site location can be to a scale of between 1:50 000 to 1:126 720. All drawings should, however, be A3 or less and of an appropriate scale such that they are clearly legible. Provide legends on all drawings and maps as appropriate.*

The provision of information in an application for a waste licence, which is false or misleading, is an offence under s45 of the Acts.

SECTION A NON-TECHNICAL SUMMARY

A Non-Technical Summary is to be submitted. The summary should include information on those aspects outlined in the Guidance Note and must comply with the requirements of Article 12 (1) (u) of the Waste Management (Licensing) Regulations, S.I. 395 of 2004.

The Non-Technical Summary should form **Attachment A.1**.

Non Technical Summary is included in the accompanying document.

SECTION B GENERAL

B.1 Applicant's Details

Name*:	Nurendale Ltd., T/A Panda Waste Services Ltd.,
Address:	Rathdrinagh,
	Beauparc,
	Navan,
	Co. Meath.
Tel:	046 - 9024111
Fax:	046 - 9024189
e-mail:	

* This should be the name of the applicant which is current on the date this Waste Licence Application is lodged with the Agency. It should be the name of the legal entity (which can be a limited company or a sole trader). A trading/business name is not acceptable.

Name and Address for Correspondence

Only application documentation submitted by the applicant and by the nominated person will be deemed to have come from the applicant.

Name:	Mr. David Naughton,
Address:	Panda Waste Services Ltd.,
	Rathdrinagh,
	Beauparc,
	Navan,
	Co Meath
Tel:	046 - 9024111
Fax:	046 - 9024189
e-mail:	

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

Address:	As above
Tel:	
Fax:	
e-mail:	

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

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

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

Landowner	☒
Lessee	☐
Prospective Purchaser	☒
Other (please specify)	

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

Name:	Mr Gerard Christopher Lynch and Ms Anna Maria Lynch
Address:	Rathdrinagh,
	Beauparc,
	Navan,
	Co Meath
Tel:	
Fax:	
e-mail:	

Name and address of the current* owner(s) and lessees of the land, buildings and ancillary plant on which the activity is or will be situated (if different from applicant named above).
An appropriately scaled drawing(≤A3) showing the above details should be included in **Attachment B1.**

Name:	Mr Gerard Christopher Lynch and Ms Anna Maria Lynch
Address:	Rathdrinagh,
	Beauparc,
	Navan,
	Co Meath
Tel:	
Fax:	
e-mail:	

*Current at the time the application is submitted

B.2 Location of Activity

Name:	Nurendale Ltd., T/A Panda Waste Services Ltd.,
Address*:	Rathdrinagh,
	Beauparc,
	Navan,
	Co. Meath.
Tel:	046 - 9024111
Fax:	046 - 9024189
e-mail:	

* Include any townland

National Grid Reference (8 digit 4E,4N)	E2973 N2689,

Location maps (≤A3), appropriately scaled, with legible grid references should be enclosed in **Attachment B.2.** The site boundary must be outlined on the map in colour.

B.3 Planning Authority

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

Name:	Meath County Council,
Address:	County Hall,
	Navan,
	Co. Meath
Tel:	046 9097000
Fax:	046 9097001

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

Planning Authority notified	**Yes** ☒
	No ☐

Planning Permission relating to this application:-

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

Local Authority Planning File Reference Nº:	SA900875

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

B.4 Sanitary Authority

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

Name: Not Applicable

Address:	
Tel:	
Fax:	

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

B.5 Other Authorities

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

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

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

Name:	Health Service Executive
Address:	Naas
	Co Kildare
Tel:	045 880400
Fax:	

B.6 Notices and Advertisements

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

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

B.7 Type of Waste Activity, Tonnages & Fees

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

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

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

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

TABLE B.7.2 MAXIMUM ANNUAL TONNAGE

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

Maximum Annual Tonnage (tpa)	250,000
Year	2011

B.7.3 FEES

State each class of activity for which a fee is being submitted as per Part I of the Second Schedule of the Waste Management (Licensing) Regulations 2004, S.I. No. 395 of 2004. Note: two fees are required if disposal and recovery are to occur.

Waste Activity	**Fee (in €)**
Disposal of Waste (appropriate disposal activity 3.2)	10,000
Recovery of Waste (4)	6,000

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

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

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

B.8 SEVESO II DIRECTIVE

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

Regulations Apply	Yes ☐	No ☒

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

SECTION C MANAGEMENT OF THE FACILITY

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

C.1 Technical Competence and Site Management

See Section 12(1) (j) of the Accompanying Document

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

Name	Position	Duties and Responsibilities	Experience /Qualifications

C.2 Environmental Management System

EMS documentation maintained on site and has been reviewed by the Agency.
Attachment C 2 should contain the Environmental Management System (EMS) details required.

C.3 Hours of Operation

See Section 12(3) (a) of the Accompanying Document

Attachment C 3 should contain details of hours of operation for the waste facility, civic waste facilities and other facilities.

(a) Proposed hours of operation.
(b) Proposed hours of waste acceptance/handling.
(c) Proposed hours of any construction and development works at the facility and timeframes (required for landfill facilities).
(d) Any other relevant hours of operation expected.

C.4 Conditioning Plan

Not Applicable
Address as **Attachment C 4,** in the case of a LANDFILL Application, and only for the review of a Landfill Waste Licence.

SECTION D INFRASTRUCTURE & OPERATION

D.1 Infrastructure

See Section 12(1) (i) of the Accompanying Document

Complete the following table detailing the site infrastructure. **Attachment D 1** should contain the appropriate documentation. Information provided should follow the sequence, and use the headings, established in Table D.1. Additional advice on completing this section is provided in the application *Guidance Note*.

Table D.1. Infrastructure		y/n	Comments
D.1.a	**Site security arrangements including gates and fencing**	y	
D.1.b	**Designs for site roads**	y	
D.1.c	**Design of hardstanding areas**	y	
D.1.d	**Plant**	y	
D.1.e	**Wheel-wash**	y	
D.1.f	**Laboratory facilities**	n	
D.1.g	**Design and location of fuel storage areas**	y	
D.1.h	**Waste quarantine areas**	y	
D.1.i	**Waste inspection areas**	y	
D.1.j	**Traffic control**	y	
D.1.k	**Sewerage and surface water drainage infrastructure**	y	
D.1.l	**All other services**	y	
D.1.m	**Plant sheds, garages and equipment compound**	y	
D.1.n	**Site accommodation**	y	
D.1.o	**A fire control system, including water supply**	y	
D.1.p	**Civic amenity facilities**	y	
D.1.q	**Any other waste recovery infrastructure**	y	
D.1.r	**Composting infrastructure**	y	
D.1.s	**Construction and Demolition waste infrastructure**	y	
D.1.t	**Incineration infrastructure (if applicable).** **Provide information to fulfil Article 4 (2) & (3) of the Incineration of Waste Directive**	n	
D.1.u	**Any other infrastructure**	n	

D.2 Facility Operation

See Section 12(1) (i) of the accompanying document

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

Attachment included	**Yes** ☐ **no** ☐ **not applicable** ☐

LANDFILLS – NOT APPLICABLE

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

D.3 Liner System

Complete the following table regarding the liner system to be used for the landfill/landfill extension and detail the information requested as **Attachment D.3**. ***Items D3c to D3g should only be completed for immediate projects only (ie Years 1 & 2).*** A schedule of Liner construction activities for the medium to long term need only be listed in item D3a below, since Condition 3 of any licences granted will provide reporting requirements for any future projects.

TABLE D.3 LINER SYSTEM

		y/n	Comments
D.3.a	**Provide information to fulfil Annex 1 of the Landfill Directive**		
D.3.b	**What type of liner system is specified?**		
D.3.c	**Has a Quality Control Plan been specified?**		
D.3.d	**Has a Quality Assurance Plan been specified?**		
D.3.e	**Have independent, third-party supervision, testing and controls been specified?**		
D.3.f	**Have basal gradients for all cells and access ramps to the cells been designed?**		
D.3.g	**Has a leak detection survey been specified?**		

D.4 Leachate Management

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

TABLE D.4.1 LEACHATE MANAGEMENT ARRANGEMENTS

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

D 5 Landfill Gas Management

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

Table D.5. Landfill Gas Management

		y/n	Comments
D.5a	**Is there a Landfill Gas Management Plan?** **Provide estimates of the volumes of landfill gas which will be produced by the waste disposed of in the site for the next 20 years, and compare to the EPER list for methane:**		
D.5b	**Is there a passive venting system?**		
D.5c	**Does the passive system cover all of the filled area?**		
D.5d	**Have gas alarm systems been installed in the site buildings?**		
D.5e	**Have measures been installed to prevent landfill gas migration (e.g. barriers)?**		
D.5f	**Has a time-scale been proposed for the installation of landfill gas infrastructure?**		
D.5g	**Is gas flaring undertaken at the site?**		
D.5h	**Is there an active (i.e., pumped) landfill gas extraction system?**		
D.5i	**Does the active system cover all of the filled area?**		
D.5j	**Is landfill gas used to generate energy at the site?**		
D.5k	**Have emissions from the flarestack and utilisation plant been assessed for source, composition, quantity and level and rate?**		
D.5l	**Has a maintenance programme for the control system been specified?**		
D.5m	**Has a condensate removal system been designed?**		

D.6 Capping System

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

Table D.6 Capping System

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

SECTION E EMISSIONS

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

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

See Section 12(1) k of the Accompanying Doc

E.1 Emissions to Atmosphere

Details of all point emissions to atmosphere should be supplied. Table E.1.(i) (for Landfill Gas Flare emissions) must be completed for all landfills with a flare. Complete Table E.1(ii) and E.1(iii) for all other main emission points, including stack sources (incinerator stacks, landfill gas utilisation plants, air handling unit emissions etc.). Complete Table E.1(iv) for minor/fugitive/ground emission points.

E.2 Emissions to Surface Waters
Attachment E.2 Tables E.2(i) and E.2(ii) should be completed where relevant.

E.3 Emissions to Sewer

Attachment E.3 Tables E.3(i) and E.3(ii) should be completed, where relevant.

E.4 Emissions to Groundwater

Describe the existing or proposed arrangements necessary to give effect to Articles 3,4,5,6, and 7 of Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against pollution by certain dangerous substances.

Table E.4(i) should be completed, as relevant, for each source.

Supporting information should form **Attachment E.4**

E.5 Noise Emissions

Give particulars of the source, location, nature, level, and the period or periods during which the noise emissions are made or are to be made.

Table E.5(i) should be completed, as relevant, for each source.

Supporting information should form **Attachment E.5**

E.6 Environmental Nuisances

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

TABLE E.6 ENVIRONMENTAL NUISANCES

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

SECTION F CONTROL & MONITORING

F.1: Treatment, Abatement and Control Systems

See Section 12(1) (l) of the Accompanying Document

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

For each Emission Point identified complete Table F.1 of the Annex, and include detailed descriptions and appropriately scaled schematics (≤A3) of all abatement systems.

Attachment F.1 should contain any supporting information.

F.2- F. 9. Monitoring and Sampling Points

See Section 12(1) (m) of the Accompanying Document

Programmes for environmental monitoring should be submitted as part of the application. These programmes should be provided as **Attachments F.2 to F.6** and meet the advice published by the Agency in the relevant BAT Note. For Landfills the additional **Attachments F.7 to F.8** should be completed. Furthermore for a landfill application the applicant must refer to the Agency *Landfill Monitoring Manual (2003)* for further details on monitoring requirements for proposed facilities.

Include details of monitoring/sampling locations and methods.

F.2 Air

- to include Dust, Odour

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

F.3 Surface Water

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

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

F.4 Sewer Discharge

NOT APPLICABLE

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

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

F.5 Groundwater

NOT APPLICABLE

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

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

F.6 Noise

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

F.7 Meteorological Data

NOT APPLICABLE

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

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

NOT APPLICABLE

F.8 Leachate

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

F.9 Landfill Gas

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

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

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

Table F.9(b) Landfill Gas Monitoring

Parameter	**Proposed Frequency of Analysis**		**Information Included Y/N**	**Method of Analysis**	**Information Included Y/N**
	Gas boreholes / vents/ wells/ perimeter locations	Facility Office			
Methane (CH_4) % v/v					
Carbon Dioxide (CO_2) % v/v					
Oxygen (O_2) % v/v					
Atmospheric Pressure					
Temperature					

Table F.9 (c) Landfill Gas Infrastructure

Equipment	**Monitoring Frequency**	**Information Included Y/N**	**Monitoring Action**	**Information Included Y/N**
Gas Collection System				
Gas Control System				

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

SECTION G RESOURCES USE & ENERGY EFFICIENCY

G.1 Raw Materials, Substances, Preparations and Energy

See Section 12(1) h of the Accompanying Document

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

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

G.2 Energy Efficiency

See Section 12(1) h of the Accompanying Document

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

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

SECTION H MATERIALS HANDLING

H.1 Waste Types and Quantities – Existing & Proposed

See Section 12(1)(g) of the Accompanying Document

Provide an estimation of the quantity of waste likely to be handled in relation to each class of activity applied for. This information should be included in Table H.1(a).

TABLE H.1(A). QUANTITIES OF WASTE IN RELATION TO EACH CLASS OF ACTIVITY APPLIED FOR

Waste Management Act 3rd Schedule (Disposal) Activities			Waste Management Act 4th Schedule (Recovery) Activities		
Class of Activity Applied For		Quantity (tpa)	Class of Activity Applied For		Quantity (tpa)
Class 1			Class 1		
Class 2			Class 2		100000
Class 3			Class 3		13000
Class 4			Class 4		75,000
Class 5			Class 5		
Class 6			Class 6		
Class 7			Class 7		
Class 8			Class 8		
Class 9			Class 9		
Class 10			Class 10		
Class 11		30000	Class 11		1000
Class 12		29000	Class 12		
Class 13		1000	Class 13		1000

In Table H. 1 (B) provide the annual amount of waste handled/to be handled at the facility. Additional information should be included in **Attachment H.1.** The tonnage per annum should be given of that expected for the life of the licence, with at least the next five years tonnages provided. For Landfill Review applications provide an estimate of the quantity of waste already deposited in (i) lined cells; (ii) unlined cells.

TABLE H.1(B) ANNUAL QUANTITIES AND NATURE OF WASTE

Year	Non-hazardous waste (tonnes per annum)	Hazardous waste (tonnes per annum)	Total annual quantity of waste (tonnes per annum)
2009	170,000	0	170,000
2010	200,000	0	200000
2011	250000	0	250000

2012	250000	0	250000
2013	250000	0	250000

A detailed inventory of the types and quantities of wastes currently handled at the site and proposed to be handled should be submitted as Table H.1 (C).

TABLE H.1 (C) WASTE TYPES AND QUANTITIES

WASTE TYPE	TONNES PER ANNUM (existing)	TONNES PER ANNUM (proposed)	TOTAL (over life of site) tonnes
Household	35000	35,000	NOT APPLICABLE
Commercial	37500	37,500	NOT APPLICABLE
Sewage Sludge			
Construction and Demolition	120000	120,000	NOT APPLICABLE
Industrial Non-Hazardous Sludges			
Industrial Non-Hazardous Solids	37500	37,500	NOT APPLICABLE
COMPOSTABLE	20000	20,000	NOT APPLICABLE
Hazardous ***(Specify detail in Table H 1.2)**	0	0	
Inert Waste imported for restoration purposes	COMPLETE FOR LANDFILL & CONTAMINATED LAND FACILITIES ONLY		

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

NOT APPLICABLE

HAZARDOUS WASTE	DETAILED DESCRIPTION * REFERENCE SHOULD BE MADE TO THE RELEVANT EUROPEAN WASTE CATALOGUE CODES AS PRESENTED BY COMMISSION DECISION 2000/532/EC	Tonnes Per Annum (Existing)	(Tonnes Per Annum Proposed)
Waste Oil			
Oil filters			
Asbestos			
Paint and Ink			
Batteries			
Fluorescent Light Bulbs			
Contaminated Soils			
OTHER HAZARDOUS WASTE (APPLICANT TO SPECIFY)			

Attachment H.1 should contain any relevant additional information.

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

H.2 Waste Acceptance Procedures

There will be no change to the current waste acceptance procedures

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

H.3 Waste Handling

See Section 12(1) (i) of the Accompanying Document

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

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

NOT APPLICABLE

H.3a Waste Handling at the Landfill Facility

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

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

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

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

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

H.4 Waste Arisings

Waste Arisings should be considered for all contaminated soil applications. Details of all waste materials generated on the site including, name, description and nature as well as the source(s) should be identified. The quantities of each type of waste generated on an annual/monthly basis should be calculated and stated in Tables H.1(i) and H. 1(ii) of the application form. Applicants should also provide conversion factors used to relate volume (m^3) and tonnage (t) for their waste stream.

SECTION I EXISTING ENVIRONMENT & IMPACT OF THE FACILITY

Detailed information is required to enable the Agency to assess the existing environment. This section requires the provision of information on the ambient environmental conditions at the site prior to the commencement of waste management activities or prior to the receipt of a review application.

Where development is proposed to be carried out, being development which is of a class for the time being specified under Article 24 (First Schedule) of the Environmental Impact Assessment Regulations, the information on the state of the existing environment should be addressed in the EIS. **In such cases, it will suffice for the purposes of this section to provide adequate cross-references to the relevant sections in the EIS.**

I.1.Assessment of atmospheric emissions

See Section 12(1)(l) of the Accompanying Document

Describe the existing environment in terms of air quality with particular reference to ambient air quality standards.

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

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

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

I.2. Assessment of Impact on Receiving Surface Water

See Section 12(1) (l) of the Accompanying Document

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

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

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

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

I.3. Assessment of Impact of Sewage Discharge.

Not Applicable

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

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

I.4 Assessment of impact of ground/groundwater emissions

See Section 12(1)(l) of the Accompanying Document

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

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

I.5 Ground and/or groundwater contamination

See Section 12(1)(l) of the Accompanying Document

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

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

I.6 Noise Impact.

See Section 12(1)(l) of the Accompanying Document

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

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

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

(ii) State the maximum Sound Pressure Levels which will be experienced at typical noise sensitive locations, outside the boundary of the operation.

(iii) Give details of the background noise levels experienced at the site in the absence of noise from this operation.

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

I.7 Assessment of Ecological Impacts & Mitigation Measures

Not Applicable

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

SECTION J ACCIDENT PREVENTION & EMERGENCY RESPONSE

See Section 12(1)(p) of the Accompanying Document

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

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

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

Supporting information should form **Attachment J.**

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

SECTION K REMEDIATION, DECOMMISSIONING, RESTORATION AND AFTERCARE

See Section 12(1)(q) of the Accompanying Document

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

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

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

SECTION L STATUTORY REQUIREMENTS

L. 1 Section 40(4) WMA

See Section 12(1)(j) of the Accompanying Document

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

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

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

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

L.2 Fit and Proper Person

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

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

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

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

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

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

SECTION M DECLARATION

Declaration

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

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

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

Signed by : _____ **Date :** 21/09/09.
(on behalf of the organisation)

Print signature name: EAMON WATERS

Position in organisation : M.D

Company stamp or seal:

ANNEX 1 STANDARD FORMS

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

NOT APPLICABLE

TABLE E.1(i) LANDFILL GAS FLARE EMISSIONS TO ATMOSPHERE

Emission Point:

Emission Point Ref. N^{o}:	
Location :	
Grid Ref. (12 digit, 6E,6N):	
Vent Details Diameter: Height above Ground(m):	
Date of commencement of emission:	

Characteristics of Emission :

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

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

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

TABLE E.1(ii) MAIN EMISSIONS TO ATMOSPHERE (1 Page for each emission point)
NOT APPLICABLE

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

Characteristics of Emission :

(i) Volume to be emitted:			
Average/day	m^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: _____

NOT APPLICABLE

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

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

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

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

1 The maximum emission should be stated for each material emitted, the concentration should be based on the maximum 30 minute mean.

2 Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0^{o}C101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.

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

Emission Point:SW1

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

Emission Details:

(i) Volume to be emitted			
Normal/day	m^3	Maximum/day	m^3

Maximum rate/hour	m^3		

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

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

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

Details will form SEW

Emission point reference number : _____

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

TABLE E.3(i): EMISSIONS TO SEWER (One page for each emission)
NOT APPLICABLE
Emission Point:

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

Emission Details:

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

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

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

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

Emission point reference number : _____

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

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

NOT APPLICABLE

Emission Point or Area:

Emission Point/Area Ref. N^{o}:	
Emission Pathway: (borehole, well, percolation area, soakaway, landspreading, etc.)	
Location :	
Grid Ref. (10 digit, 5E,5N):	
Elevation of discharge: (relative to Ordnance Datum)	
Aquifer classification for receiving groundwater body:	
Groundwater vulnerability assessment (including vulnerability rating):	
Identity and proximity of groundwater sources at risk (wells, springs, etc):	
Identity and proximity of surface water bodies at risk:	

Emission Details:

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

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

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

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

MONITORING DATA PROVIDED IN ACCOMPANYING DOC

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

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

TABLE F.1: ABATEMENT / TREATMENT CONTROL

See Section 12(1) of the accompanying doc

Emission point reference number : _____

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

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

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

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

See Accompanying doc

Emission Point Reference No(s). : _____

Parameter	Monitoring frequency	Accessibility of Sampling Points

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

MONITORING DATA PROVIDED IN ACCOMPANYING DOC

Monitoring Point Reference No :_____

Parameter	Monitoring frequency	Accessibility of Sampling point

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

See accompanying Doc

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

Notes: 1. In cases where a material comprises a number of distinct and available dangerous substances, please give details for each component substance.
2. c.f. Article 2(2) of SI Nº 77/94
3. c.f. Schedules 2 and 3 of SI Nº 77/94

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

Not applicable

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

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

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

See accompanying Doc

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

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

All monitoring Data in the accompanying Document

Table I.2(i) SURFACE WATER QUALITY

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

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

Surface Water Quality (Sheet 2 of 2)

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

Table I.4(i) GROUNDWATER QUALITY

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

Parameter	Results (mg/l)				Sampling method (composite etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
pH							
Temperature							
Electrical conductivity EC							
Ammoniacal nitrogen NH_4-N							
Dissolved oxygen DO							
Residue on evaporation (180^oC)							
Calcium Ca							
Cadmium Cd							
Chromium Cr							
Chloride Cl							
Copper Cu							
Cyanide Cn, total							
Iron Fe							
Lead Pb							
Magnesium Mg							
Manganese Mn							
Mercury Hg							
Nickel Ni							
Potassium K							
Sodium Na							

GROUNDWATER QUALITY (SHEET 2 OF 2)

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

Table I.6(i) Ambient Noise Assessment

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

	National Grid Reference	Sound Pressure Levels		
	(5N, 5E)	$L(A)_{eq}$	$L(A)_{10}$	$L(A)_{90}$
1. SITE BOUNDARY				
Location 1:				
Location 2:				
Location 3:				
Location 4:				
2. NOISE SENSITIVE LOCATIONS				
Location 1:				
Location 2:				
Location 3:				
Location 4:				

NOTE: All locations should be identified on accompanying drawings.

APPLICATION TO REVIEW

WASTE LICENCE REG. NO. W0140-03

PANDA WASTE SERVICES LTD.

RATHDRINAGH, NAVAN

CO. MEATH

Prepared For: -

PANDA Waste Services Ltd.,
Rathdrinagh,
Beauparc,
Navan,
Co. Meath

Prepared By: -

O' Callaghan Moran & Associates,
Granary House,
Rutland Street,
Cork.

22nd September 2009

APPLICATION TO REVIEW

WASTE LICENCE REG NO. W0140-03

PANDA WASTE SERVICES LTD.

RATHDRINAGH, NAVAN

CO. MEATH

Prepared For: -

PANDA Waste Services Ltd.,
Rathdrinagh,
Beauparc,
Navan,
Co. Meath.

Prepared By: -

O' Callaghan Moran & Associates,
Granary House,
Rutland Street,
Cork.

22nd September 2009

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INTRODUCTION

Nurendale Ltd., trading as Panda Waste Services Ltd. (PANDA), is applying to the Environmental Protection Agency (Agency) for a review of the Waste Licence for its Materials Recycling Facility at Beauparc, Navan, County Meath (Reg. No.W0140-03). The objectives of the review are: -

- To extend the licence area to encompass a new building (Building 4), which will house a combined Anaerobic Digestion (AD) and Composting system to treat the biowaste fraction of the Municipal Solid Waste (MSW) accepted at the facility. Biogas generated in the AD stage will be used as a fuel in an on-site Combined Heat and Power (CHP) plant;

- To allow the installation of an Refuse Derived Fuel (RDF) manufacturing plant in Building 3, which will process mixed MSW to produce a fuel, and will include an odour treatment system comprising a Regenerative Thermal Oxidizer (RTO);

- To amend Condition 1.5.3 so as to permit the continuous operation of the AD/Composting and the RDF manufacturing systems;

- To amend Condition 8.6 to allow the operation of the C&D processing plant, in a dedicated area outside the Transfer Building.

The format of the application is based on the requirements of Parts II and III of the Waste Management (Licensing) Regulations 2004 (2004 Regulations) and in particular Articles 5, 6, 7, 9, 12 and 13 of those Regulations.

1. ARTICLE 5, 6, 7 & 9

A copy of the notice published in a newspaper circulating in the area; a copy of the site notice, and the written notice submitted to the planning authority are included overleaf. The location of the site notices is shown on Drawing No. 2009-101-101.

LEGAL

CELERITY FLUID SYSTEMS IRELAND LIMITED, trading as Celerity Fluid Systems Ireland Limited, having its registered Office at Unit 1B Plato Business Park, Damastown, Dublin 15, having ceased to trade and having its principal place of business at Unit 1B Plato Business Park, Damastown, Dublin 15 and having no assets or liabilities, has resolved to notify the Registrar of companies that the company is not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to Section 311 of the Companies Act 1963 to strike the name of the company off the Registrar By Order of the Board Peter English.

MASTER LITHOCRAFT LIMITED and RODBY LIMITED having ceased to trade on 30 November 1999, GUINOL SECURITIES LIMITED having ceased trading on 30 November 2000, and PARK EXPRESS INVESTMENTS LIMITED having ceased trading on 30 April 2003, and having their registered office and principal place of business at Units 6 – 11 Eklad Park, Malahide Industrial Park, Newtown, Dublin 17, and having no assets or liabilities, has each resolved to notify the Registrar of Companies that the company is not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to section 311 of the Companies Act 1963 to strike the name of the company off the register. By Order of the Board Kevin Walsh Director

CURRAHEA INVESTMENTS LIMITED and DIGITAL PRE-PRESS LIMITED having ceased to trade on 31 December 2000, TECHMAN IRELAND LIMITED having ceased trading on 31 January 2003, and DOLEGA SECURITIES LIMITED having ceased trading on 31 March 2000, and having their registered office and principal place of business at Units 6 – 11 Eklad Park, Malahide Industrial Park, Newtown, Dublin 17, and having no assets or liabilities, has each resolved to notify the Registrar of Companies that the company is not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to section 311 of the Companies Act 1963 to strike the name of the company off the register. By Order of the Board Kevin Walsh Director.

IRISH ELECTRONIC SYSTEMS LTD. having its Registered Office at Shancurragh, Coosan, Athlone, Co. Westmeath and having its principal place of business at Shancurragh, Coosan, Athlone, Co. Westmeath. having ceased to trade, and having no assets or liabilities, has resolved to notify the Registrar of Companies that the Company is no longer carrying on business and to request the Registrar on that basis to exercise his powers pursuant to Section 113 of the Companies Act 1963 to strike name of the company off the register. By order of the Board, Directors JOHN GIBBONS BERNADETTE GIBBONS.

SUPERSEAL (M&L) LIMITED, having it's registered office at 62 Calderwood Road, Donnybrook, Douglas, Cork and having it's principal place of business at 62 Calderwood Road, Donnybrook, Douglas, Cork having ceased to trade, and having no assets or liabilities, has resolved to notify the Registrar of Companies that the Company is not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to section 311 of the Companies Act 1963 to strike the name of the Company off the register. By order of the Board. Maurice McCarthy Secretary Date: 18th September 2009

CAMP \IGNSOLUTIONS LTD, trading as Campaign Solutions Ltd, having ceased to Trade and having its registered office at 42 Ashgrove, Kill Avenue, Dun Laoghaire, Co Dublin and having its principal place of business at 42 Ashgrove, Kill Avenue, Dun Laoghaire, Co Dublin, and having no assets or liabilities, has resolved to notify the Registrar of Companies that the company is not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to section 311 of the Companies Act 1963 to strike the name of the company off the register. By Order of the Board, Niall O'Sullivan Director 18th day of September

FIRE & ENERGY CONTROL LIMITED Having its registered office and principal place of business at Unit 18, Claregalway Corporate Park, Claregalway. Co. Galway, having never traded and having no assets or liabilities, has resolved to notify the Registrar of Companies that the Company is not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to Section 311 of the Companies Act 1963 to strike the name of the Company off the Register. By Order of the Board. J Glynn Director

TSL GRAPHIC DESIGN LIMITED, registered office and principal place of business at Mullenmore North, Crossmolina, Co. Mayo, having ceased trading and which has no assets or liabilities, has resolved to notify the Registrar of Companies that the Company in not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to Section 311 of the Companies Act 1963 to strike the name of the company off the register. By order of the Board.

BAILY SALTHILL LIMITED AND SYMPHONY INVESTMENTS LIMITED Having their registered office and principal place of business at Block E, An Fuaran, Moycullen, Co. Galway and formerly having their registered office at 6 Raven Terrace, Galway having never traded in the case of Baily Salthill Limited and having ceased to trade in the case of Symphony Investments Limited and having no assets or liabilities, have resolved to notify the Registrar of Companies that the Companies are not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to Section 311 of the Companies Act 1963 to strike the names of the Companies off the Register. By Order of the Board. J Grealish Director

SYNERGY EXTREME LIMITED, having it's registered office at 192, Seapark, Malahide, Co. Dublin, having ceased to trade, and having no assets or liabilities has resolved to notify the Registrar of Companies that the company is not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to section 311 of the Companies Act 1963 to strike the name of the company off the register. By the order of the Board Ethna Collier Director.

B L A C K R O O M ENTERTAINMENT LIMITED, having it's registered office at 1, Ferrycarrig Road, Coolock, Dublin 17, having ceased to trade, and having no assets or liabilities has resolved to notify the Registrar of Companies that the company is not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to section 311 of the Companies Act 1963 to strike the name of the company off the register. By the order of the Board John Rahaman Director.

IN THE MATTER OF COMPANIES ACTS 1963 – 2001 AND IN THE MATTER OF Lightbox Multimedia LIMITED Notice is here by given pursuant to Section 266 of the Companies Act 1963, that a meeting of the Creditors of the above named company will be held at The Georgian Business Centre, 20 Lr. Baggot Street, Dublin 2 on Weds. 30th Sept. 2009 at 11 o'clock for the purposes mentioned in Sections 267 and 268 of the said Act. BY ORDER OF THE BOARD Dated this 16th Sept, 2009.

IN THE MATTER OF COMPANIES ACTS 1963 - 2009 AND IN THE MATTER OF KEETECH ENGINEERING LIMITED Notice is hereby given pursuant to Section 266 of the Companies Act 1963 that a Meeting of the Creditors of the above named Company will be held at Park Plaza, Church Street , Tyrrelstown , Dublin on 2 October 2009 at 12 pm for the purposes mentioned in Section 266, 267 and 268 of the said Act. By Order of the Board. Dated 17 September 2009.

CREDITORS CALL in the matter of Drakebury Construction Limited (In Voluntary Liquidation) And In the matter of The Companies Acts 1963-2009 Notice is hereby given that all creditors of the above company (in voluntary liquidation) should send details of any outstanding claims to the liquidator Derek Scanlon of FGS, Church Street, Longford, to be received no later than 18th Day December 2009. Dated this 17th Day of September 2009 Derek Scanlon Liquidator Note: This is a member's voluntary liquidation.

FINAL MEETING - In the matter of P. Cooney & Sons Limited (In Members voluntary liquidation) And in the matter of The Companies Acts 1963-2009 Notice is hereby given pursuant to Section 263(2) of the Companies Act, 1963 that a General Meeting of the above mentioned Company's members will be held at Floor 2, The Atrium, Maritana Gate, Canada Street, Waterford on the 16th October 2009 at 10.00 a.m. for the purpose of having an account laid before it showing the manner which the Company has been disposed and hearing any explanation which may be given by the liquidator and further, pursuant to Section 305 of the companies Act, 1963 for the purpose of directing the manner in which the books, accounts and papers of the Company and of the liquidator shall be disposed of. Dated this 14th day of September, 2009 David Breen David M. Breen & Co. Liquidator

IN THE MATTER OF THE COMPANIES ACTS 1963 TO 2006 AND IN THE MATTER OF EDCAR PROPERTIES (In Voluntary Liquidation) NOTICE is hereby given that a meeting of the Members of the above named company shall be held at The Mews, 10 Pembroke Place, Dublin 2 on Friday the 27th of October 2009 at 11.00 a.m. for the purposes mentioned in Sections 263 and 305 of the Companies Act, 1963. Dated this 16th day of September 2009 Peter Stewart Liquidator.

THE COMPANIES ACTS, 1963 TO 2009 and In the matter of HAYES STEEL FABRICATIONS LIMITED NOTICE IS HEREBY GIVEN pursuant to Section 266 of the Companies Act, 1963 that a Meeting of the Creditors of the above named Company will be held in The Gresham Metropole Hotel, MacCurtain Street, Cork on 30th September 2009 at 9.30am for the purposes mentioned in Section 267 and 268 of the Companies Act, 1963. BY ORDER OF THE BOARD Dated the 15th day of September 2009 NOTE: Where any person wishes to be represented and/or vote by Proxy, the form of Proxy must be lodged at Crowleys DFK, Fifth Floor, 5 Lapp's Quay, Cork not later than 4pm on 29th September 2009.

LEGAL NOTICE Voluntary Strike-Off Application Schwarzkopf (Ireland) (formerly "Schwarzkopf (Ireland) Limited"), having its registered office at 70 Sir John Rogerson's Quay, Dublin 2 having ceased trading and having no assets or liabilities, has resolved to notify the Registrar of Companies that the company is not carrying on business and to request the Registrar on that basis to exercise his powers pursuant to section 311 of the Companies Act 1963, as amended to strike the name of the company off the register.By Order of the Board Director DATE: 16th day of September 2009.

IN THE MATTER OF THE COMPANIES ACTS, 1963 TO 2009 AND IN THE MATTER OF Paddy's Heatshop Limited NOTICE IS HEREBY GIVEN pursuant to Section 266 of the Companies Act, 1963 that a meeting of the Creditors of the above Company will be held at The Midway House Hotel, Daingean, Co Offaly at 9:00 a.m. on the 29th day of September 2009 for the purposes set out in Sections 267 and 268 of the said Act. By Order of the Board Secretary Date: 16 September 2009

In the Matter of THE COMPANIES ACTS 1963 – 2006 And In the Matter of SDA SUPERMARKET LIMITED NOTICE is hereby given pursuant to Section 266 of the Companies Act, 1963 that a meeting of the creditors of the above company will be held at The Doughcloyne Hotel, Doughcloyne, Cork on the 30th September 2009 at 10.30am for the purposes mentioned in section 267 and 268 of the said Act. BY ORDER OF THE BOARD Dated this the 17th day of September 2009.

IN THE MATTER OF LIAM DOYLE FENCING LIMITED (In Voluntary Liquidation)AND IN THE MATTER OF THE COMPANIES ACTS 1963 to 2009 Notice is hereby given pursuant to Sections 263 and 305 of the Companies Act, 1963 that a final meeting of the members of the above company will be held at 53 Iona Crescent, Drumcondra, Dublin 9 on the 16th day of October 2009 at 10.00 a.m. for the purposes set out in the above-mentioned sections of the said Act.Dated this 18th day of September 2009 GERARD P. REYNOLDS Liquidator Note: This is a members voluntary winding up and all admitted creditors have been or will be paid in full.

EMPLOYMENT AGENCY ACT, 1971 We Gilligan Black Recruitment Ltd hereby give notice of our intention to apply for renewal of our licence under the above Act to carry on the business of an employment agency at the premises specified below: 46 Lower Leeson Street Dublin 2.

THE CIRCUIT COURT (AN CHUIRT CHUARDA) RECORD NO 2007/00118 MIDLAND CIRCUIT COUNTY OF ROSCOMMON EUGENE GREANEY PLAINTIFF-AND- MARTIN LECKEY DEFENDANT ADVERTISEMENT FOR INCUMBRANCES Pursuant to the Order of the Circuit Court made in the above mentioned suit at Roscommon on the 28th day of October 2008 all persons claiming to be incumbrancers affecting the interest of the Defendant in all that and those the lands comprised in Folio RN3081F and Folio RN35103 of the Register of Freeholders County Roscommon situate in the Townland of Ballyclare, Barony of Ballintubber South and County of Roscommon are to send by prepaid registered post to the County Registrar for the County of Roscommon at the Circuit Court Office, Court House, Roscommon Co Roscommon on or before the 25th day of September 2009 their Christian and surnames and full particulars of their claims and the nature of the securities held by them or in default thereof they will be excluded from the benefit of the said Order. Every such incumbrancer holding any security is required to produce same before the County Registrar for the County of Roscommon at the Courthouse, Roscommon, Co Roscommon on the 19th day of October 2009 at 2.30pm in the afternoon being the time appointed for the adjudication on the claims and of which sitting all persons interested are hereby required to take notice. Dated the 18th day of August 2009 Signed William G Lyster County Registrar for the County of Roscommon Circuit Court Office Courthouse, Roscommon Co Roscommon Thomas K Madden Solicitors for the Plaintiff 1 Camlin View Longford.

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR THE REVIEW OF WASTE LICENCE REG. NO. W0140-03 Nurendale Ltd, trading as Panda Waste Services Ltd, is applying to the Environmental Protection Agency for a review of Waste Licence Reg. No. W0140-03 in respect of its operations in the townland of Rathdrinagh, Navan, Co. Meath, which is located at National Grid References: E2973 N2689. The aims of the review are to change the boundaries of the licensed area; permit the operation of an anaerobic digestion and composting system in a new building; permit the operation of a combined heat and power plant (CHP); permit the manufacture of Refuse Derived Fuel (RDF) in an existing building, amend the operational hours to allow the continuous operation of the anaerobic digestion and composting system, the CHP and the manufacture of RDF and approve the processing of Construction and Demolition Wastes in a Lean-To outside the transfer buildings. The types of waste accepted at the facility will remain: Non-hazardous - Household, Commercial & Industrial, Compostable and Construction & Demolition waste. There will be no change to the amounts of waste that are already authorised for acceptance. The relevant waste disposal and waste recovery activities, as per the Third and Fourth Schedules of the Waste Management Acts 1996 to 2003, and the Waste Management (Licensing) Regulations 2004, (S.I. No. 395 of 2004) to which this application relates are: - Third Schedule – Waste Disposal Activities 12: 'Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule'. 11: 'Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule'. 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 Principal Activity: 2: 'Recycling or reclamation of organic substances, which are not used as solvents (including composting and other biological processes)'. Other Activities: 4:'Recycling or reclamation of other inorganic materials'. 11: 'Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule'. 13: 'Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced'. A copy of this application for a review of the waste licence 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.

THE DISTRICT COURT Dublin Metropolitan District IN THE MATTER OF: THE AUCTIONEERS AND HOUSE AGENTS ACTS 1947-1973 AND IN THE MATTER OF: SECTIONS 11 AND 12 OF THE AUCTIONEERS AND HOUSE AGENTS ACT 1947 AND IN THE MATTER OF: AN APPLICATION BY KARL HANNIGAN trading as HWP Applicant TAKE NOTICE that it is the intention of KARL HANNIGAN trading as HWP having his principal place of business at Unit 1B Cookstown Industrial Estate, Tallaght, Dublin 24 in the City of Dublin to apply to the District Court sitting at Court No. 52, Richmond Hospital in the City of Dublin on the 21st October 2009 at 10.30 o'clock in the forenoon for a Certificate of Qualification to carry on the business of an Auctioneer. AND TAKE NOTICE THAT: 1. The Applicant proposes to carry on business as an Auctioneer under the name of Karl Hannigan trading as HWP. 2. The Applicant proposes to have his principal place of business in the State in the District Court Area aforesaid at Unit 1B Cookstown Industrial Estate, Tallaght, Dublin 24 in the City of Dublin. Dated this 18th day of September 2009. Signed Denis McSweeneySolicitors for the Applicant, Grand Canal House, 1 Upper Grand Canal Street Dublin 4. To The Superintendent, An Garda Siochana, Tallaght Garda Station Tallaght Dublin 24 To: Licensing Office, Aras Ui Dhalaigh Dublin 7 DATED THIS DAY OF 2009 THE DISTRICT COURT Dublin Metropolitan District IN THE MATTER OF: THE AUCTIONEERS AND HOUSE AGENTS ACTS 1947-1973 AND IN THE MATTER OF: SECTIONS 11 AND 12 OF THE AUCTIONEERS AND HOUSE AGENTS ACT 1947 BY KARL HANNIGAN trading as HWP 0. Applicant APPLICATION DENIS MCSWEENEY, SOLICITORS, 1 UPPER GRAND CANAL STREET DUBLIN 4.

PLANNING

LOUTH COUNTY COUNCIL - Further Information; Planning RegisterRef.No.08/1148:Significant Further Information has been furnished to the planning authority (Louth County Council, County Hall, Millennium Centre, Dundalk, Co. Louth) by Drocarne Limited in respect of the following development: Drocarne Ltd. applied for permission for a mixed use residential development totalling approx 40,046.2 sqm gross floor space comprising 354 residential units (268 apartments and 86 houses), a crèche building, retail/ community building, associated parking and services infrastructure and for the demolition of two existing agricultural sheds on a site of approx 7.16 hectares at Tullyallen and Mell townlands, Drogheda, Co. Louth adjacent and to the east of the M1/N51 interchange. The proposed 268 no. apartments consist of 5 no. four storey (above semi-basement) blocks labelled A-E with a total of 40 no. one bed apartments, 116 no. two bed apartments and 112 three bed apartments with an overall gross floor space of approx 28,956 sqm. 402 no. carparking spaces, bicycle and apartment storage areas and refuse facilities for the proposed apartments are to be provided in semi-basement podium structures located under and adjacent to the apartment blocks. The proposed 86 no. houses (gross floor space 9,433 sqm approx) consist of two storey semi-detached and terrace units with 30 no. two bed, 30 no. three bed and 26 no. four bed units with 172 no. associated parking spaces (167 no. surface parking spaces and 5 no. provided in semi-basement of Block D). The proposed two-storey crèche building measures (gross floor space 694 sqm approx) and provides 10 no. carparking surface parking spaces, a set-down / drop-off area and an outdoor play area. The proposed two storey retail/ community building (gross floor space 963.2 sqm approx) comprises 6 no. retail units totalling 569.5 sqm (individually measuring 95.9 sqm, 97.7 sqm, 92.7 sqm, 67.7 sqm, 67.7 and 147.8 sqm respectively) and a community facility unit (providing meeting rooms, multi-purpose hall, etc.) measuring 378 sqm and ancillary areas measuring 15.7 sqm. 58 no. carparking spaces to service the retail units are also proposed (30 no. located in podium carpark and 28 no. surface spaces located adjacent the retail/community building). The development will also consist of the demolition of two existing agricultural sheds measuring approximately 203.5 sqm, an internal road, street and footpath network and access road, a series of public open spaces measuring approximately 1.57 hectares, linear stream walkway, associated hard and soft landscaping; boundary treatments; plant and equipment including 3 no. ESB substations & switchrooms, a foul water pumping station, surface water swales and attenuation areas and all other necessary site development works above and below ground level. The Significant Further Information submitted to Louth County Council in respect of this proposed development, is available for inspection or purchase at the offices of the authority during its public opening hours (Mon-Fri 9am-5pm). A submission or observation in relation to the further information may be made in writing to the planning authority within the two week statutory time limit beginning on the date of receipt by the planning authority of the revised site notice and newspaper notice. A submission or observation must be accompanied by the prescribed fee, except in the case of a person or body who has already made a submission or observation.

FINGAL COUNTY COUNCIL Planning Permission is sought by Alfio Borza for change of use from an existing Dry Cleaners to a traditional Fast Food Takeaway Outlet, with newfully glazed shopfront incorporating new illuminated shop sign (4000 mm. long x 400 mm. high approx.) and roller shutter, related alterations to the internal space, rear elevation and all services, at Unit 6, Laurel Lodge Shopping Centre, Castleknock, Dublin 15. The planning application may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy at the offices of Fingal County Council, Grove Road, Blanchardstown, Fingal, Dublin 15 from 9.30am to 3.30pm Monday to Friday. A submission or observation may be made to the Authority in writing on payment of the prescribed fee (Eur 20) within the period of 5 weeks beginning on the dateof receipt by the Authority of this Application.

LOUTH COUNTY COUNCIL: FURTHER INFORMATION AND REVISED PLANS. Reg. Ref. 08/1200. We, Tesco Ireland Limited have furnished significant further information and revised plans in relation to the application Reg. Ref. 08/1200 in relation to development at a site of 1.63ha at Drogheda Road (N2 National Primary Route), Ardee, Co. Louth (Townlands of Stonylane and Mullahrillen) to the planning authority, which are available for inspection or purchase, at a fee not exceeding the reasonable cost of making a copy, at the offices of the planning authority (County Hall, Millennium Centre, Dundalk, Co. Louth) during its public opening hours (9.30am to 4.30pm Monday to Friday). A submission or observation in relation to the further information and revised plans may be made in writing to the planning authority on payment of the prescribed fee, not later than 2 weeks after the receipt of the newspaper notice and site notice by the planning authority.

STAR SHORTS

Barham's bouncing

GOLF

ENGLAND'S Benn Barham equalled the lowest round of his career yesterday to lead the Austrian Open in Vienna.

Needing to climb 60 places from his present 175th to save his European Tour card, the 33-year-old from Kent shot an eight-under-par 63 to finish the opening day one in front of Scotland's Scott Drummond and Australian Brett Rumford.

Barham grabbed seven birdies and an eagle two on the 423-yard 13th, where his 150-yard approach pitched just past the flag and spun back in.

Renault set to leave F1

FORMULA ONE

SHAMED Renault team could be out of Formula One in six weeks.

The French car giants could be fined €20m when they face the FIA's World Motor Sport Council on Monday in Paris.

They're accused of ordering Nelson Piquet Jr to crash in Singapore last season, helping teammate Fernando Alonso while the safety car was out.

The alleged plot, which Alonso was unaware of, has seen chief Flavio Briatore and director of engineering Pat Symonds quit the team.

Renault are likely to leave the sport after the Abu Dhabi GP on November 1.

Inquiry into Caster affair

ATHLETICS

SOUTH Africa athletics chiefs have launched an inquiry into the way they handled the Caster Semenya affair.

World athletics bosses commissioned a gender test on the teenager after her 800m triumph in the World Championships in Berlin last month.

Reports have suggested she is a hermaphrodite, and there has been a war of words between the South Africans and the world governing body.

Huge scalp for Niland in Turkey

TENNIS

CONOR NILAND yesterday dumped out the top seed in the ITF Futures event in Istanbul.

No.6 seed Niland took the opener in his quarter-final clash against Marcel Ilhan, but No.1 Turkey player stormed back to level.

The Limerick man took the decider to win 6-4 2-6 6-3.

In today's semi, Niland takes on Japan's Junn Mitsuhashi or Belarus' Uladzimir Ignatik.

SITE NOTICE

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR

THE REVIEW OF WASTE LICENCE REG. NO.W0140-03

Nurendale Ltd, trading as Panda Waste Services Ltd, is applying to the Environmental Protection Agency for a review of Waste Licence Reg. No. W0140-03 in respect of its operations in the townland of Rathdrinagh, Navan Co Meath, which is located at National Grid References: E2973 N2689. The aims of the review are to change the boundaries of the licensed area; permit the operation of an anaerobic digestion and composting system in a new building; permit the operation of a combined heat and power plant (CHP); permit the manufacture of Refuse Derived Fuel (RDF) in an existing building; amend the operational hours to allow the continuous operation of the anaerobic digestion and composting system, the CHP and the manufacture of RDF, and approve the processing of Construction and Demolition Wastes in a Lean-To outside the transfer buildings. The types of waste accepted at the facility will remain: Non-hazardous - Household, Commercial & Industrial, Compostable and Construction & Demolition waste. There will be no change to the amounts of waste that are already authorised for acceptance.

The relevant waste disposal and waste recovery activities, as per the Third and Fourth Schedules of the Waste Management Acts 1996 to 2003, and the Waste Management (Licensing) Regulations 2004, (S.I. No. 395 of 2004) to which this application relates are: -

Third Schedule – Waste Disposal Activities

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

11: 'Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule'.

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

Principal Activity:

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

Other Activities:

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

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

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

A copy of this application for a review of the waste licence 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, County Wexford.

Signature

Date: 22nd September 2009

Granary House
Rutland Street
Cork

Tel. [021] 4321521
Fax. [021] 4321522

environmental management for business

Planning Department,
Meath County Council,
County Hall,
Navan,
Co. Meath

22nd September 2009

RE: Review of Waste Licence Ref. No. W0140-03

Dear Sir / Madam,

We wish to notify you, on behalf of our client Nurendale Ltd., trading as Panda Waste Services Ltd. (PANDA), of the intention to apply to the Environmental Protection Agency for a review of the Waste Licence for PANDA's Materials Recovery Facility at Beauparc, Navan, County Meath, which is located at National Grid References: E2973 N2689.

The relevant waste recovery activities, as per the Third and Fourth Schedules of the Waste Management Acts 1996 to 2003, and the Waste Management (Licensing) Regulations 2004, (S.I. No. 395 of 2004) to which this application relates are: -

Third Schedule – Waste Disposal Activities

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

11: 'Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule'.

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

Principal Activity:

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

Cont'd

Other Activities:

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

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

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

A copy of the application for a review of the waste licence 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, County Wexford.

Yours sincerely,

Jim O' Callaghan

0913806/JOC/MS
CC: Mr. David Naughton, Panda Waste Services Ltd.,

2. ARTICLE 12 (1)

The following is provided in compliance with Article 12(1) of the Waste Management (Licensing) Regulations, 2004, as amended.

Article 12 (1) (a)

Applicant Details

Nurendale Ltd.,
T/A Panda Waste Services Ltd.,
Rathdrinagh,
Beauparc,
Navan,
Co. Meath.

Telephone No.: 046 - 9024111
Fax No.: 046 - 9024189

A Certificate of Incorporation is included in Appendix 1.

The Corporate address is as above.

The Directors are: -

- Mr. Eamon Waters
- Mr. Noel Waters.

Name and Address for Correspondence

Mr. David Naughton,
Panda Waste Services Ltd.,
Rathdrinagh,
Beauparc,
Navan,
Co. Meath.

Telephone No.: 046 - 9024111
Fax No.: 046 - 9024189

Article 12 (1)(b)

The relevant planning authority is Meath County Council. An application for planning permission for the construction of Building 4 and the development of the AD/Composting system was submitted to the Council in June 2009 (Ref. No.SA/900875). On 18th September the Council issued a Notice of its Decision to Grant Permission for the proposed development.

Article 12 (1)(c)

The facility does not discharge trade effluent to sewer. Conditions 3.13 and 3.15 of the current Licence requires process wastewater (floor wash down and vehicle wash) and composting wastewater to be directed to an on-site wastewater storage tank, the contents of which are removed off-site to a wastewater treatment plant. The proposed manufacture of RDF will not generate a trade effluent. The AD/Composting system will generate a trade effluent, but this will be collected and removed off site for treatment.

Article 12 (1)(d)

The facility is located in Rathdrinagh, Beauparc, Navan, County Meath. It is in the townland of Rathdrinagh, at National Grid Reference: E2973 N2689. The location is shown on Drawing No. 1, 1:50,000. The site is on the N2, approximately 4km south of Slane. The River Boyne flows in an easterly direction approximately 3km northeast of the site.

The facility is bordered to the west by the N2 and to the north by the Knockcommon Road. Surrounding landuse is predominantly agriculture, however there are some commercial units to the west. There are nine residential dwellings with 0.5km of the site along Knockcommon Road, with a further thirteen residences within 0.5km along the N2 and Senchelstown Road. Drawing No. 2 shows the surrounding landuses.

The proposed extension encompasses 3.2 hectares (ha) and adjoins the eastern boundary of the current licence area. It is part of a larger farm holding that is currently used as pasture and has no particular amenity value. The proposed extension area is not owned by the applicant, but the landowner's consent to the application has been obtained.

Article 12 (1)(e) Nature of the facility

The facility is a non hazardous waste materials recycling and transfer operation. Wastes are processed to recover materials suitable for recycling, and to minimise the quantity of treated waste disposed to residual landfill. The objective of the proposed changes to the licensed activities is to increase recycling rates, reduce to a minimum the amount of waste sent to landfill and to reduce dependence on non renewable energy sources. The existing layout is shown on Drawing No. 2009-101-102.

Article 12 (1)(f)

It is not proposed to alter the existing Third and Fourth Schedule of the Waste Management Acts 1996 - 2008 activities. The principal activity will change from Class 4 of the Fourth schedule to Class 2 of the Fourth schedule.

Third Schedule – Waste Disposal Activities

Class 12

"Repackaging prior to submission to any activity referred to in the preceding paragraph of this Schedule".

Waste at the site is treated, baled and compacted prior to consignment to off-site licensed disposal facilities.

Class 11

"Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule".

Treated household and commercial/industrial wastes are mixed prior to consignment to off-site licensed landfills.

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".

Treated wastes are stored prior to consignment to off-site licensed disposal facilities.

Fourth Schedule – Waste Recovery Activities

Class 2

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

Recycling, comprising anaerobic digestion and composting of organic wastes, and the manufacture of refuse derived fuel will be the principal waste activity.

Class 3

"Recycling or reclamation of metals and metal compounds".

Metals and wire, which are recovered from the incoming waste, and aluminium cans delivered to the site separately, are stored on-site pending removal to off-site recycling facilities.

Class 4

"Recycling or reclamation of other inorganic materials".

Inorganic materials comprising inert Construction and Demolition (C&D) waste and glass are recovered from the incoming waste and stored pending removal off-site for recycling.

Class 11

"Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule".

Inert wastes maybe used at the site subject to approval from the Agency.

Class 13

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

Treated wastes are stored prior to consignment to off-site permitted/licensed recycling and reclamation facilities and for use as fuels.

Article 12 (1)(g)

It is not proposed to alter the types of waste accepted at the facility from that specified in Condition 1.3 and Table A.1 of the current Licence.

Article 12 (1)(h)

Details on the fuels and energy that were used at the facility in 2008 are presented in Table 12.1 h., which includes the megawatt hours and tonnes of carbon dioxide produced. As the electricity is supplied by Airtricity, 0 tonnes of carbon dioxide are produced.

The AD/Composting and RDF processing will result in an increase in an increase in energy usage. However, this will be off-set by the electricity and heat generated from the CHP plant. The heat from the CHP will be used to heat the digesters, pasteurisation tunnels and in RDF drier. As the electricity from the CHP plant will be generated from biowaste this means that 0 tonnes of carbon dioxide generated.

PANDA has completed an Energy Audit of the facility and this will be reviewed following commissioning of the CHP plant.

Table 12.1.h – Energy Used 2008

	Consumption (MWhr)	%	tCO2
Electricity	1086.44	4.00	76.49
Diesel	20626.95	75.87	5156.74
Gas Oil	5475.26	20.14	1368.81
Total	**27188.64**		**6602.04**

Article 12 (1)(i) Plant, methods, processes, ancillary, abatement, recovery and treatment systems and operating procedures

AD/Composting Plant

The proposed AD/Composting facility involves the extension of the current licensed area; construction of a new building (12,183m^2); provision of an access road from the existing facility and hardstanding areas (3,350m^2) for vehicle manoeuvring; construction of 2 above ground steel process wastewater storage tanks (154m^2 and 78.5m^2) and 2 No. above ground concrete process waste water storage tanks (each 61.45m^2) (ref.: Drawing No. 2009-101-103). The construction will require cut and fill to reach formation levels, with the soils excavated in the northern part of the building footprint used to raise the ground level in the southern part.

The new building will be positioned to the east of the existing Buildings 2 and 3, which along with the roadside hedgerows and proposed landscaping measures, will provide screening from the N2 (ref.: Drawing No. 2009-101-103). Building elevations and sections are shown on Drawings No. 2009-101-201 and 301.

The type of AD that is proposed is 'Dry Fermentation' and it will be carried out is a series of fourteen (14 No.) fully enclosed fermenters located in the northern part of the building (ref.: Drawing No. 2009-101-202). This will produce a bio-gas, which will be scrubbed and used as a fuel in the CHP plant.

After the dry fermentation stage, the residual materials will be composted in a series of fully enclosed forced aeration tunnels, followed by a pasteurisation stage. The pasteurisation will achieve the Department of Agriculture, Food and Fisheries (DAFF) requirements to comply with the Animal By-Products Regulations. The finished product will be suitable for horticultural or agricultural use. Further information on the proposed AD/Composting process, including plant capacity, is provided in Appendix 2.

All waste handling will be carried out internally, which will prevent the attraction of birds and facilitate the effective control of vermin and pests. An odour management system will be installed to control odours and will comprise air extraction, scrubbing and treatment in a roof mounted bio-filter. The building roof plan is shown on Drawing No. 2009-101-203. More detailed information on the treatment system is given in the odour impact assessment prepared by Odour Monitoring Ireland Ltd., which forms Appendix 3.

The electricity generated by the CHP plant will be fed into the national grid. The heat will be used to raise the temperature of the both the digesters and the pasteurizers and in the manufacture of the RDF, which will be carried out in Building 3.

RDF Manufacture

The processing of mixed MSW (black bin) produces a range of paper and plastics, which due either to their nature, or presence of contamination, are not suitable for direct recycling. At present, such materials, are being disposed to landfill. The processing also produces an organic fraction, which is predominantly biodegradable. Currently, this fraction is either directly disposed to landfill, or is biologically treated to reduce its biodegradability before being used as landfill cover.

National Waste Policy, which is based *inter alia* on the Landfill Directive, requires the diversion of very significant volumes of biodegradable waste from landfill and there is an urgent need to reduce the amount of biodegradable wastes that are currently landfilled.

The paper/plastic/organic fines recovered from the mechanical processing of the black bin waste have a high calorific value and are suitable for use as a replacement for fossil fuels in intensive energy using industries, such as cement manufacture. The moisture content of the 'black bin' waste is in the range of 30% to 40%. The optimum moisture content for RDF is 15% and therefore, there is a need to reduce the moisture content of this waste stream.

It is proposed to relocate the 'black bin' mechanical treatment from Building 1 to Building 3. The processing plant will be the same as that currently deployed (bag shredder, screen, eddy current separator, magnets), but a drier will be provided at the end of the separation process, which will be used to reduce the moisture content. The drier will initially be fuelled by Liquid Petroleum Gas (LPG), but this will be replaced by heat from the proposed CHP plant.

As the materials that will be processed are odorous, there is a need to provide an odour abatement system as specified in Condition 3.11.3 of the current Licence. The mechanical waste processing area will be segregated from the rest of the building and provided with a negative air pressure system. Odorous air will be extracted from the mechanical treatment area and the drier and directed to the odour abatement system.

The abatement system will comprise particulate removal (dust cyclone), followed by venturi and alkaline scrubbers which will treat the air before it is fed to a three canister RTO. The exhaust gases from the RTO will vent to atmosphere via a stack located at the eastern side of the building. The proposed layout of the system is shown on the Figure in Appendix 3. The design has not yet been finalised and there may be some changes in the plant configuration, but this will not change the emission design limits. Further information on the abatement system is given in the odour impact assessment report in Appendix 3.

C & D Waste Processing

C & D wastes are currently processed in a Lean-To, located along the eastern boundary of the current licensed area. The Lean-To is enclosed on three sides, with the western side open. The processing plant used include a crusher, a screener (flip-flop) and an enclosed density separator. The crusher and screener are located inside the Lean-To, with the density separator positioned outside. The floor of the Lean-To and the adjacent open yards are concrete paved.

The C&D wastes are initially processed inside Building 2 where they are segregated into different fraction sizes and then transferred to the Lean-To. Heavy items (>1kg), such a concrete blocks and rubble, are passed through the crusher, which produces an inert aggregate. The smaller fraction is passed through the 'flip flop' screen, which produces two fractions. The larger fraction (>12mm) is passed through the density separator, which removes paper and plastics.

The materials processed in the' flip flop' are stored in bays inside the Lean-To. The inert aggregate produced by the crusher is stockpiled in the open yard. The materials from the density separator are stored in roofed bays.

Article 12 (1)(j)

Compliance with Paragraphs (a) to (g) of Section 40 (4) of the Waste Management Acts 1996 2008.

Section 40 (4) (a)

Details of the emissions from the proposed extension are described in Sections 12(1)k. The emissions will not result in the contravention of any relevant standard or emission limit prescribed under enactment.

Section 40 (4) (b)

Facility operations, when carried out in accordance with the Licence conditions, will not cause environmental pollution.

Section 40 (4) (c)

The current and propose waste activities are based on best management practice and take into consideration the BAT Guidance Note for the Waste Sector: Waste Transfer Activities published by the Agency.

Section 40 (4) (d)

A certified Copy of the Certificate of Incorporation of Nurendale Ltd. is included in Appendix 1. The current management structure is shown in the 2008 AER, which included in Appendix 4. Facility personnel with responsibility for the management of the waste activities comply with the requirements of Condition 2.1 of the current Licence.

On 15th September 2009, Nurendale Ltd., trading as Panda Waste Services, was convicted at Navan District Court of an offence under Sections 39(1) and 39(9) of the Waste Management Acts 1996 to 2008 relating to a breach of its previous Licence (W0140-02) by accepting a tonnage of waste that exceeded the maximum annual tonnage permitted (165,000 tonnes). This was the only charge brought by the Agency and there was no evidence given in relation to any environmental impairment associated with the licence breach. The current Licence (W0140-03), which was granted in March 2009, allows the acceptance of 250,000 tonnes per annum.

The relevant section of the profit and loss account for PANDA for the year ending 2007 is included in Appendix 1. Financial provision in place to address any environmental liability includes insurance cover to the sum of €6,500,000 for any one occurrence**.**

Section 40 (4) (f)

Energy will be used efficiently in the carrying on of the activity.

Section 40 (4) (g)

Noise from the activity will comply with and will not result in the contravention of any regulations under Section 106 of the Act of 1992.

Article 12(1)(k) Particulars of the source location, nature, composition, quantity, level and rate of emissions arising from the activity and the periods during which such emissions are made are presented here.

Actual and potential emissions from facility operations include, surface water, noise, dust, wastewater, odours, and exhaust emissions from the RDF processing and CHP plant. The current Licence (W0140-03) requires PANDA to carry out monitoring to quantify and assess the impacts associated with the existing emissions.

Details of the existing emissions and an assessment of the effects, based on the monitoring results, are presented below. The results include the monitoring completed so far in 2009, during which time C&D processing was carried out in the Lean To. New emissions associated with the proposed new waste activities are also described.

Surface Water

Surface water run-off from the existing facility discharges via silt traps and petrol/oil interceptors to an underground holding tank, where it is stored pending consignment to an off-site waste water treatment plant. Originally, surface water run-off discharged to a watercourse along the southern site boundary, but this stopped in 2006 following agreement with the Agency. Surface water monitoring has not been carried out since the discharge to the water course stopped, as it was no longer required.

The current Licence allows for the discharge of run-off from the existing open yard areas to a constructed wetland, which has yet to be installed. Construction of the wetland is expected to start in Q4 2009.

The surface water drainage system serving Building 4 is shown on Drawing No. 2009-101-103**.** Run-off from the extension area will be intermittent and linked to rainfall. The rainwater run-off the paved yards will discharge to a soakaway via an oil interceptor. Run-off from the roof of Building 4 will be kept separate from yard run-off and will be collected in an existing aboveground water storage tank, which has a capacity of 660m^3 and is used to supply a dust suppression system, the road sweeper and the jet vac fleet. At present, the tank is filled with water abstracted from two on-site wells. The rainwater will replace the groundwater, but the wells will be retained as back-up during dry weather.

Sanitary Wastewater Discharges

Sanitary and canteen wastewater discharges to an on-site Biocycle treatment system and percolation area in accordance with Condition 3.11. It is not proposed to install additional welfare or canteen facilities and sanitary wastewater will continue to be treated in the on-site system, which has ample capacity to accommodate the expected additional 15 staff members.

Process Wastewater Discharges

Existing process wastewater from floor wash downs and vehicle wash discharges via silt traps to the on-site underground holding tank, before removal off-site to the Navan Waste Water Treatment Plant (WWTP). The tank also takes run-from the existing open yard areas, including those adjacent to the C&D processing area at the Lean To. The wastewater quality is monitored and the most recent results are presented in Table 12(1)(k).

The AD/Composting system will generate wastewater. A mass balance of wastewater likely to be produced from the system and the proposed management measures are presented in Appendix 5. In so far a possible the wastewater will be reused in the process, but surplus liquid will be sent to the Navan WWTP, where the wastewater currently produced at the facility is treated.

Table 12(1)k A Wastewater Quality

Parameter	Units	Result 08/07/09
BOD	mg/L	12500
Cadmium	ug/L	1.9
Calcium	mg/L	1026
Cobalt	ug/L	19.9
COD	mg/L	48600
Copper	ug/L	248
Iron (Total)	ug/L	140900
Lead	ug/L	325.9
Magnesium	mg/L	35.95
Manganese	ug/L	3690
Nickel	ug/L	90.5
VOC	ug/L	2372
Tin	ug/L	23.6

Groundwater

There are no direct emissions to groundwater from the facility and groundwater monitoring is not required under the current licence. The proposed extension area will be concreted as shown on Drawing 2009-101-103. Surface water run-off from the open paved yard around Building 4 will discharge to a soakaway. Estimates of the volumes of water that will discharge to the soakaway are presented in the Hydrogeological Assessment Report in Appendix 6.

Dust

The potential sources of dust emissions are vehicle movements over paved areas during dry periods, processing of C&D wastes at the Lean To and external timber shredding. Dust monitoring is carried out at four (4) locations three (3) times per annum. The results of the monitoring carried out to date in 2009 are presented in Table 12(1).

Table 12 (1) k B Dust Monitoring Results

Sampling location	Mass of dust in sample (g)	Calculation	Dustfall (mg m^{-2} d^{-1})
DS 1	0.0103	$X = \frac{10.3}{0.0038 \times 30}$	89
DS 2	0.0092	$X = \frac{9.2}{0.0038 \quad 30}$	80
DS 3	0.0116	$X = \frac{11.6}{0.0038 \times 30}$	101
DS 4	0.0104	$X = \frac{10.4}{0.0038 \times 30}$	90

The dust deposition limit specified in the licence (350 mg/m2/day) was not exceeded. Dust monitoring results for 2008 are presented in the 2008 AER , which is included in Appendix 4. The 2008 and 2009 results confirm that the current waste activities, including the C&D processing at the Lean To, are not a source of dust nuisance.

The proposed AD/Composting and manufacture of RDF will be carried out indoors and the buildings will be provided with active odour control measures, which will also be effective in minimising the release of dust emissions. Vehicles travelling on the new paved areas are a potential source of dust in dry weather. However, the mitigation measures currently employed, including damping down paved areas, have proven to be effective in controlling emissions from such sources.

Noise

Existing on-site sources of noise include timber shredding, vehicle movements, operational plant within the buildings, the C&D processing area at the Lean To and the compost tunnels. Noise monitoring is carried out quarterly at four (4) on-site locations and two (2) noise sensitive locations. The limit values for noise at the noise sensitive locations are Daytime 55 dB(A) LAeq(30 minutes) and Night Time 45 dB(A) LAeq(30 minutes).

A summary of the results from a noise survey carried out in 2009 are shown in the Table 2.1 of the Noise Impact Assessment Report in Appendix 7. The noise sensitive locations are the closest residences to the eastern boundary and are identified as No 1 and No 2. The monitoring shows that the ELV was not exceeded at these locations. The monitoring result for 2008 (Ref.: 2008 AER in Appendix 4) confirms that the noise emissions from the facility are consistently comply with the Licence limits.

The proposed AD/Composting and RDF manufacture are new sources of noise emissions. An assessment of the impact of the emissions from Building 4, which will house the AD/Composting, was completed by Noise & Vibration Consultants Ltd and the results presented in Appendix 7. The assessment describes the noise sources, mitigation measures and the predicted levels at the nearest noise sensitive locations. It concludes that noise from the proposed activities will not be a source of nuisance outside the licensed boundary.

A further assessment of the combined impact of emissions from both the AD/Composting and RDF manufacturing in Building 3 was completed and the results are presented in Table 1 Appendix 2 of Noise & Vibration Consultants Ltd Report. The assessment concluded that the combined emissions will not be a source of nuisance outside the licensed boundary.

Odours

The current Licence requires monitoring of the biofiltration system serving the drying tunnels. The monitoring has confirmed that the biofiltration system is functioning properly and odour nuisance has not been an issue at the facility. The tunnels will be decommissioned following the start of the proposed AD/Composting system.

The proposed AD/Composting system and the RDF manufacture are significant sources of odours. An odour impact assessment, which includes a description of the odour sources, the proposed odour management system, emission points and dispersion modelling is included in Appendix 3. The report refers to the AD/Composting System as 'Dry Fermentation.' The assessment concludes that the proposed activities will not be a source of odour nuisance.

Air Emissions

The CHP plant and the RTO will be new sources of air emissions. The CHP plant will comprise at least two and possibly three gas engines, each with its own emission point. The number of the engines will depend on the volumes of gas generated. Although the precise location of the engines has not yet been established, as it will be determined by the position of the pasteurizer and the RDF drier, they will be located at a point between Buildings 3 and 4. The approximate locations of the gas engines and the proposed position of the RTO stack from the RTO are shown on Drawing No. 3 Proposed Monitoring & Emissions Locations**.**

It is envisaged that both the CHP and the RDF drier will operate continuously, with occasional down time for maintenance purposes. Each of the gas engines will have a stack of approximately 15m high, a maximum flow rate of 3000m^3/hour and a efflux velocity of greater than 15m/s. The RTO stack will be approximately 20 m high, with a flow rate of 35,000m^3 hour and an efflux velocity of 20m/s.

The exhaust gases from both the CHP and the RTO will contain a range of potential pollutants. These pollutants and proposed emission limit values are presented in Tables 12(1)k C and 12(1)kD**.** The proposed ELVs are based on BAT for the waste sector and, in the case of the CHP, are consistent with those set in other Waste Licences.

Table 12 (1)kC Proposed Emission Limit Values for the RTO

Pollutant	Proposed emission limit values	Recognised emission limit value (mg/Nm^3)	Notes
Carbon monoxide (mg/Nm^3)	600	-	-
Oxides of nitrogen (mg/Nm^3)	200	-	-
Sulphur dioxide (mg/Nm^3)	300	-	-
Total Particulates (mg/Nm^3)	10	10 mg/Nm^3	TaLuft, 2002 – Section 5.4.8.10.1
Hydrogen chloride (mg/Nm^3)	20	20 mg/Nm^3 or mass flow less than 0.10 kg/hr	TaLuft, 2002 – Section 5.4.8.10.1
Hydrogen fluoride (mg/Nm^3)	5.0	5.0	TaLuft, 2002 – Section 5.2.4
Total organic carbon (mgC/Nm^3)	10	20 mgC/Nm^3	TaLuft, 2002 – Section 5.4.8.10.1
Odours (Ou_E/m^3)	1,000	-	-
$Volume_{wet}$ (Nm^3/hr)	30,000	-	-

Notes: All values referenced to 11% O_2

12(1)k D Proposed Emission Limit Values For CHP Plant

Pollutant	Proposed emission limit values	Recognised emission limit value (mg/Nm^3)	Notes
Carbon monoxide (mg/Nm^3)	1,400	1,400	LFTGN08 Table 5.3a
Oxides of nitrogen (mg/Nm^3)	500	500	LFTGN08 Table 5.3a
Sulphur dioxide (mg/Nm^3)	200	-	-
Total Particulates (mg/Nm^3)	130	130 mg/Nm^3	See Waste licence W04-03, W081-03, W0178-01,
Hydrogen chloride (mg/Nm^3)	50	50 mg/Nm^3 at mass flow less than 0.30 kg/hr	See Waste licence W04-03, W081-03, W0178-01
Hydrogen fluoride (mg/Nm^3)	5.0	50 mg/Nm^3 at mass flow less than 0.050 kg/hr	See Waste licence W04-03, W081-03, W0178-01
Total organic carbon (mgC/Nm^3)	1,000	1,000 mgC/Nm^3	LFTGN08 Table 5.3a
Total non methane VOC's ($mgC/Nm^{3)}$	75	75	LFTGN08 Table 5.3a
$Volume_{wet}$ (Nm^3/hr)	<3,000	-	-

Notes: All values referenced to 5% O
There will be two gas engines operating and possibility a third depending on feedstock. It is intended to dust all emissions to a single emission point.

Article 12 (1)(l) Assessment of the effects of emissions from the facility resulting from the proposed changes to facility operations and the proposed measures to prevent or eliminate or, where that is not practicable, to limit or abate such emissions.

Surface Water

The proposed changes will not have any effect on any off-site surface water courses. Run-off from the roof of Building 4 (12,183m^2), which will be generated in a 1:25 year storm event (26.57mm/hr 60min duration) is estimated to be 324m^3, which is approximately 50% of the storage tank's capacity (660m^3). Run-off in a 1:100 storm event (33.00 mm/hr 60min duration) is estimated to be 402m^3. The storage tank has sufficient capacity for the rainfall runoff.

Run-off from the new paved yards will discharge to a proposed on-site soakaway. A hydrogeological assessment of the proposed soakaway assessment included percolation tests and the preparation of a Sustainable Urban Drainage System (SUDS) design. A copy of the assessment report is included in Appendix 6.

Wastewater

It is not proposed to alter the existing sanitary wastewater system. It is expected that there will be approximately 15 extra employees at the facility once it is fully operational and the Biocycle unit has the capacity to handle the additional volume. The treated effluent will continue to be discharged to ground via the percolation area. It is not proposed to alter the existing monitoring programme for the Biocycle treatment system, as specified in Schedule C of the current Licence.

Groundwater

Surface water run-off from the open paved yard areas will discharge to a soakaway. Details of the soakaway and an assessment of the impacts are presented in the Hydrogeological Assessment Report in Appendix6.

Dust

The C&D processing and the proposed new waste activities are potential sources of dust. The existing control measures effectively mitigate the impacts of dust emission from current activities, as evidenced by the monitoring results. These control measures will continue to be applied. The proposed new activities will be carried out inside buildings that are provided with odour control systems, which will also effectively mitigate dust emissions.

Noise

Noise monitoring has consistently shown that noise levels measured at the nearest noise sensitive locations are below the emission limit set in the current Licence. The proposed changes to the waste activities, including the sue of Building 4, will not affect the position of the existing noise sensitive locations, which are close to the facility's northeastern site boundary.

The proposed waste activities are new sources of noise emissions. An assessment of these noise emissions is presented in the Noise Impact Assessment Report in Appendix 7. Section 7 of the report describes the noise mitigation measures that will be applied, which include the construction of a 4m high acoustic perimeter berm; provision of acoustic louvers on extraction vents and openings in the building and the installation of double skin cladding or insulation in the building.

Odours

The existing two in-vessel composting tunnels and the associated air treatment biofilter will be decommissioned following the start of the AD/Composting plant. At present, the bioflter is functioning properly and odours are not a cause of nuisance at the facility. The proposed waste activities are new sources of odours. A detailed assessment of the impact of these new odour emissions is presented in the Odour Impact Assessment in Appendix 3.

Air Emission Limits

The CHP plant and the RTO will be designed and operated to achieve the proposed ELVs presented in Tables 12(1)k C and 12(1)k D. The ELVs, which are based on BAT, will ensure that the emissions will not result in any environmental impairment outside the facility boundary.

Nuisances

Birds can be attracted to waste management facilities where there is available foodstuff. The mixed waste MSW and C&I waste include some residual amounts of foodstuff. All of the putresible waste processing is and will be carried out internally and all putresible wastes will be removed from the facility in fully enclosed vehicles. These waste management practices are proven to eliminate bird attraction at the facility.

Vermin and insects are potential problems at facilities where putrescible waste is not handled properly. However, this usually arises where waste is either being disposed of (landfill) or being stored for long periods of time. As a preventative measure PANDA already retains a pest control contractor and the control programme will be expanded to include Buildings 3 and 4.

Article 12 (1)(m)

The location of the existing and monitoring points is shown on Drawing No. 3. The drawing also shows the location of the proposed new emission points, which include the stacks from the CHP plant (A2-1, A2-2, A2-3), the stack from the RTO (A2-4) and the stack from the biotrickling filter (A2-5). As discussed above, the precise locations of the CHP plant has not yet been determined, however the details, including the grid references will be submitted to the Agency for approval before the plant is commissioned. The construction of Building 4 will result in the location of NSL 3 and NSL4 noise monitoring points and dust location AD3. Proposed alternative monitoring locations are shown on Drawing No. 3.

The existing facility does not currently discharge to surface water and therefore there are no surface water emission or monitoring locations shown on Drawing No. 3 with the exception of the discharge from the proposed new yard area to the proposed percolation area (SW1). Once the constructed wetland has been installed Drawing No. 3 will be amended to show the exact location of the surface water emission and monitoring locations.

Article 12 (1)(n)

The objective of the proposed new waste activities is to increase facility's recycling rate and minimise the amount of materials sent for disposal.

Article 12 (1)(o)

It is the objective of the AD/Composting system to produce a product that will be not be classified as a waste. It is intended to sell this product to individual farmers, horticulturalists and landscape companies. The RDF will be used as a replacement for fossil fuels in cement kilns.

Article 12 (1)(p)

The existing measures, including emergency procedures, to prevent unauthorised or unexpected emissions and minimise the impact on the environment are described in the facility's Environmental Management System (EMS).

PANDA has prepared an Emergency Response Procedure (ERP) for the facility in compliance with Condition 9 of the current licence.

There are two fuel tanks on-site (fleet and green diesel) which are bunded in accordance with Condition 3.18 of the current Licence. There are spill kits provided at each of the waste processing buildings and additional spill kits will be provided in Buildings 3 and 4.

The facility is paved and run-off from the existing yard area is directed to a holding tank and then sent off site for treatment. It is intended to install a constructed wetland which will treat the existing runoff. Runoff from the yards in the Licence extension area will be directed to soakaway via a Class 1 oil interceptor.

Article 12 (1)(q)

The proposed amendments to the current Licence will not impact on the measures for the closure, remediation and aftercare of the facility, as regulated by Condition 10 of the current Licence. In the event of the cessation of activities and an application to surrender the Licence, the precise scope of the closure and decommissioning plan will be agreed with the Agency.

Article 12 (1)(r)

Not applicable, as the activity is not a landfill.

Article 12 (1)(s)

The activity is not an activity to which the European Communities (Major Accident Hazards of Certain Activities) Regulations, 2001 as amended apply.

Article 12 (1)(t)

The activity is not one that gives rise or could give rise to an emission into an aquifer containing List 1 and II substances specified in the Annex to the Council Directive 80/68/EEC of 17 December 1979.

PANDA carried out extensive research on a range of waste treatment technologies that could achieve its objective of reducing to a minimum the volume of materials that are consigned to landfill and replacing non-renewable energy sources. These included stand alone anaerobic digestion, pyrolysis, composting and manufacture of bio-diesel from recovered plastics.

Article 12(l) u

A non-technical summary of the information provided in accordance with paragraphs (a) to (t) of Article 12 (1) is in Section 6 of this application.

3. ARTICLE 12 (3)(a)

The relevant conditions of the current Licence that are the subject of the review and grounds for the application are, as required by Article 12 (3) (a) of the 2004 Regulations, as follows.

Condition 1.5.3

The hours of waste acceptance and hours of operation are specified in Condition 1.5. It is intended to maintain these hours of acceptance and operation, but to change Condition 1.5.3 to allow the continuous operation of the Anaerobic Digestion and Composting Plant and the RDF manufacturing plant.

Condition 1.6

PANDA is seeking to amend the licence area to include the proposed extension area to the north to accommodate Building 4. The proposed licence area is shown on Drawing No. 2009-101-103.

Condition 8.6

PANDA is seeking to amend this Condition to allow the processing of C& D waste at the Lean-To.

4. ARTICLE 12 (4)

Article 12 (4)(a)

A copy of the relevant page of the newspaper in which the notice in accordance with Article 6 has been published is included in Section 1 of this application.

Article 12 (4)(b)

A copy of the text of the notice erected in accordance with Article 7 is included in Section 1 of this application.

Article 12(4)(c)

A copy of the notice given to the planning authority is included in Section 1 of this application.

Article 12(4)(d)

The position of the notice in accordance with Article 7, is shown on. Drawing No 2009-101-101 Site Location. Drawings showing the points at which monitoring and sampling are undertaken are shown on Drawing No. 3.

Article 12(4)(e)

The fee for the review of the waste licence, €16,000, as specified in Article 41(3) and the Second Schedule of the Waste Management (Licensing) Regulations 2004, is enclosed. The fee includes for: -

- The disposal of waste (other than hazardous waste) at a facility (other than a landfill facility) where the annual intake is likely to exceed 25,000 tonnes but be less than 100,000 tonnes;

- The Recovery of Waste.

5. ARTICLE 13 (1)

An EIS is not required for this application.

6. NON TECHNICAL SUMMARY

Introduction

Nurendale Ltd., trading as Panda Waste Services Ltd. (PANDA) is applying to the Environmental Protection Agency (Agency) for a review of the current Waste Licence (Reg. No. W0140-03) for its waste processing facility at Beauparc, Navan, County Meath. The objectives of the review are: -

- To extend the licence area to include a new building (Building 4), which will house a biological treatment system. The system, which is a combination of anaerobic digestion and composting, will treat organic waste to produce a compost. Gases produced during the digestion stage will be used as a fuel to generate electricity and heat, which will be used at the facility and sold to electricity supply companies;

- To allow the processing of household and commercial waste to recover materials, for example paper and plastic, that are can be used as a fuel, for example in cement manufacturing. These materials are called Refuse Derived Fuel (RDF);

- To amend Condition 1.5.3 of the current licence to allow the continuous operation of the biological treatment and RDF manufacturing systems;

- To amend Condition 8.6 to allow the continued operation of the construction and demolition waste processing plant in a dedicated open area.

Nature of the Facility

The facility only accepts non-hazardous wastes, which are processed to recover wastes that are suitable for recycling and to reduce the amount sent to landfill. At present there are two main buildings (Building 1 and Building 2) used for waste processing. A third building, Building 3, is being constructed to accommodate the RDF system. It is proposed to construct a new building, Building 4, to accommodate the biological treatment system.

Classes of Activity

It is not proposed to change the type of waste activities, as defined in Third and Fourth Schedules of the Waste Management Acts 1996 – 2008, that are carried out. These are:-

Third Schedule – Waste Disposal Activities

Class 12

"Repackaging prior to submission to any activity referred to in the preceding paragraph of this Schedule".

Class 11

"Blending or mixture 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 processes)".

Class 3

"Recycling or reclamation of metals and metal compounds".

Class 4

"Recycling or reclamation of other inorganic materials".(p)

Class 11

"Use of waste obtained from 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 such waste is produced".

Quantity and Nature of the Waste to be Recovered or Disposed

There will be no change to the types and quantities of waste that are authorised by the current Licence. These are shown in Table 6.1.

Table 6.1 Waste Types and Quantities

WASTE TYPE	MAXIMUM (TONNES PER ANNUM) (Note 1)
Household waste	35,000
Commercial & Industrial	75,000
Construction and Demolition	120,000
Compostable	20,000
TOTAL	**250,000**

Note 1: The quantities of the different categories referred to in this table may be amended with the agreement of the Agency provided that the total quantity of waste specified is not exceeded.

Raw and Ancillary Materials, Substances, Preparations used on the Site

Diesel, lubricating oil and hydraulic oil are used in the waste processing equipment. Electricity is used to power some of the processing equipment and also in the offices and yard lighting. Drinking water is taken from the County Council mains. Groundwater from an on-site well, which is stored in a tank, is used to damp down the yards during dry weather so as to prevent dust.

Plant, Methods, Processes and Operating Procedures

The biological treatment system includes a series of fully enclosed tanks, called digesters, in which the wastes will be initially treated. At the start of the process, the oxygen in the air in the digesters will be used up by the microbes in the waste to produce anaerobic (no oxygen) conditions.

The microbes will break down the waste and, in the process, produce a number of different gases (biogas). The most common gas will be methane, which can be used as a fuel to generate electricity. The biogas will be cleaned (scrubbed) to remove contamination and fed into 3 gas powered electricity generators. The electricity from the generators will be supplied to the national electricity grid.

The digesters will reduce the amount of organic material in the wastes. The waste will then be moved to the composting area, where the wastes will be composted in fully enclosed containers called tunnels. Air will be supplied to the tunnels to ensure that oxygen levels are kept at the level needed to complete the composting.

When the composting process is complete, the material will pasteurised using a high heat to ensure that all the microbes have been killed. This stage is required to meet the conditions set by the Department of Agriculture Fisheries and Food for the treatment of wastes containing meat and fish. The final product will be sold to farmers, market gardeners and landscape contractors and the general public.

Unprocessed household and commercial wastes contain water, in some cases up to 40% by weight, which affects the quality of the materials for use as fuel. The most favourable moisture content is around 15%, and therefore it is necessary to dry the wastes. It is proposed to dry the processed wastes in an air direr in Building 3. The wastes will be placed inside a drying drum and the drum heated using either liquid petroleum gas or heat from the on-site gas powered electricity generators.

Information Related to paragraphs (a) to (g) of Section 40 (4) of the Waste Management Acts 1996 2003.

The actual and potential emissions associated with the new waste activities include noise, dust, odour, trade effluent and rainwater run-off will not breach any applicable legal standard or emission limit. Trade effluent, which includes water from washing down the floors of the buildings, is collected and stored in a tank before being taken to the Council's Navan Sewage Treatment Plant.

The proposed site activities take into consideration the Best Available Technique (BAT) Guidance Note for the Waste Sector: Waste Transfer Activities published by the Agency and when carried out in accordance with the new Licence conditions, will not cause environmental pollution. It is not proposed to amend the current management team.

On 15th September 2009 Nuerndale Ltd. was convicted at Navan District Court of an offence under the Waste Management Act for a breach of its previous Licence (W0140-02) relating to taking in more waste than approved under the licence. The current Licence (W0140-03), which was granted in March 2009, allows the acceptance of 250,000 tonnes per annum.

Emissions

Surface Water

Rainwater run-off from the existing concrete yards is collected in an underground tank and stored before being sent off-site for treatment. PANDA already has approval to change the drainage system to channel the water to a new reed bed, which will be installed in late 2009. Rainwater from the roof of Building 4 will be collected in a tank and used at the site for spraying the yards to keep dust down. Rainfall on the new concrete yards will be collected and passed through an oil interceptor and into a soakaway.

Sanitary Wastewater

Sanitary and canteen wastewater is collected and treated in an on-site sewerage treatment plant. The treated wastewater goes to a percolation area. There will be no new sources of sanitary wastewater and the treatment plant has the capacity to cope with the estimated 15 new people that will work in Buildings 3 and 4.

Process Wastewater

Floor washings from Buildings 1 and 2 and the truck wash is collected in an underground tank and sent to the Council's Navan treatment plant. Additional wastewater will be produced in the biological treatment process. Much of this can be reused in the process, but any that cannot be sent to the Navan treatment plant.

Groundwater

The only emissions to ground are the treated sanitary wastewater from the on-site treatment plant and rainwater run-off from the new concrete yards. The rainwater will pass through silt traps and an oil interceptor before it enters the soakaway.

Dust

The main source dust emissions with the potential to cause a nuisance are vehicle movements over the concrete yards in dry weather and the Construction and Demolition Waste processing area. The new waste activities are also sources of dust, but these will be carried out inside the buildings, which will effectively prevent dust causing a nuisance.

Odours

A number of the different household and commercial wastes processed at the facility contain materials (for example foodstuff) that are a source of strong odours. The biological treatment and the manufacture of RDF are also sources of malodours. All odorous wastes are handled inside the buildings and are not processed or stored in open areas.

The existing composting tunnels are provided with an odour control system, which draws air from the tunnels into what is called a biofilter, where the substances that form the odours are removed. This treatment system has proven very effective in controlling odours. It is expected that the two tunnels will be shut down following the start of the biological treatment in Building 4. Building 3 and Building 4 will be provided with separate odour management systems designed to ensure that odours from the buildings will not be a cause of nuisance.

Noise

The noise sources include the Construction & Demolition waste processing, equipment operating inside the buildings and truck and car movements.

Assessment of the Effects of the Emissions

Surface Water

The proposed changes will not result in any new emissions from the site to adjoining or nearby streams. Rainfall on the concrete yards can become contaminated with silt and small quantities of oil that may leak from vehicle oil sumps. The rainwater run-off from the yards will pass through silt traps and interceptors, which will reduce the contamination to acceptable levels, before it enters either the new reed beds or soakaway.

Sanitary Wastewater

The existing on-site sanitary wastewater treatment plant has the capacity to handle has the capacity to cope with the estimated 15 new people that will work in Buildings 3 and 4.

Process Wastewater

The biological treatment plant will produce a wastewater. Much of this will be reused in the process and any surplus will be collected and sent to the Navan sewage treatment plant.

Groundwater

There are no direct emissions to groundwater. Treated sanitary wastewater goes to a percolation area. The treatment plant is operating satisfactorily and has the capacity to handle the expected additional staff. Rainwater from the concrete yards will pass through silt traps and an oil interceptor before entering the on-site soakaway. This will minimise the risk of groundwater contamination.

Dust

There are water mist sprays in Building 1 and 2 which effectively control dust emissions. The odour control systems that will be provided in Buildings 3 and 4 will also effectively control dust. The open yard areas are and will continue to be dampened down during dry weather. The dust monitoring carried out at the site has confirmed that current operations are not a source of dust nuisance.

Odours

The existing two composting tunnels will be shut down following the start of the biological treatment in Building 3. The odour control system in Building 3 will involve the collection of air from inside the building and directing it to a biofilter. This system is broadly similar to the only that has successfully operated at the existing tunnels.

The control system in Building 4 will involve the collection of air inside the building and directing it to a Regenerative Thermal Oxidizer, where the air will be subjected to high temperatures to reduce the levels of the odorous substances. A computer model assessment of

the odour impacts has confirmed that the emissions from Buildings 3 and 4 will no be a cause of odour nuisance.

Noise

Noise monitoring at the facility has consistently shown noise emissions measured at the nearest noise sensitive locations below the emission limit specified in the existing licence.

Nuisances

Birds can be attracted to sites where there is available foodstuff. The waste accepted at the site include some foodstuff. All waste that have the potential to contain food stuff are and will be processed and stored inside the building. This has already been found to eliminate bird attraction.

Monitoring and Sampling Points

The construction on Building 4 means that one of the current noise monitoring and dust monitoring points along the eastern boundary will be lost. It is proposed to replace these with alternative monitoring points that will be located further to the east.

Prevention and Recovery of Waste

The aim of the Licence Review is to increase PANDA's recycling rates and reduce the amounts of waste sent to landfill.

Off-site Treatment or Disposal of Solid or Liquid Wastes

The new waste activities will not result in any changes to the types or method of treatment or disposal of solid and liquid wastes.

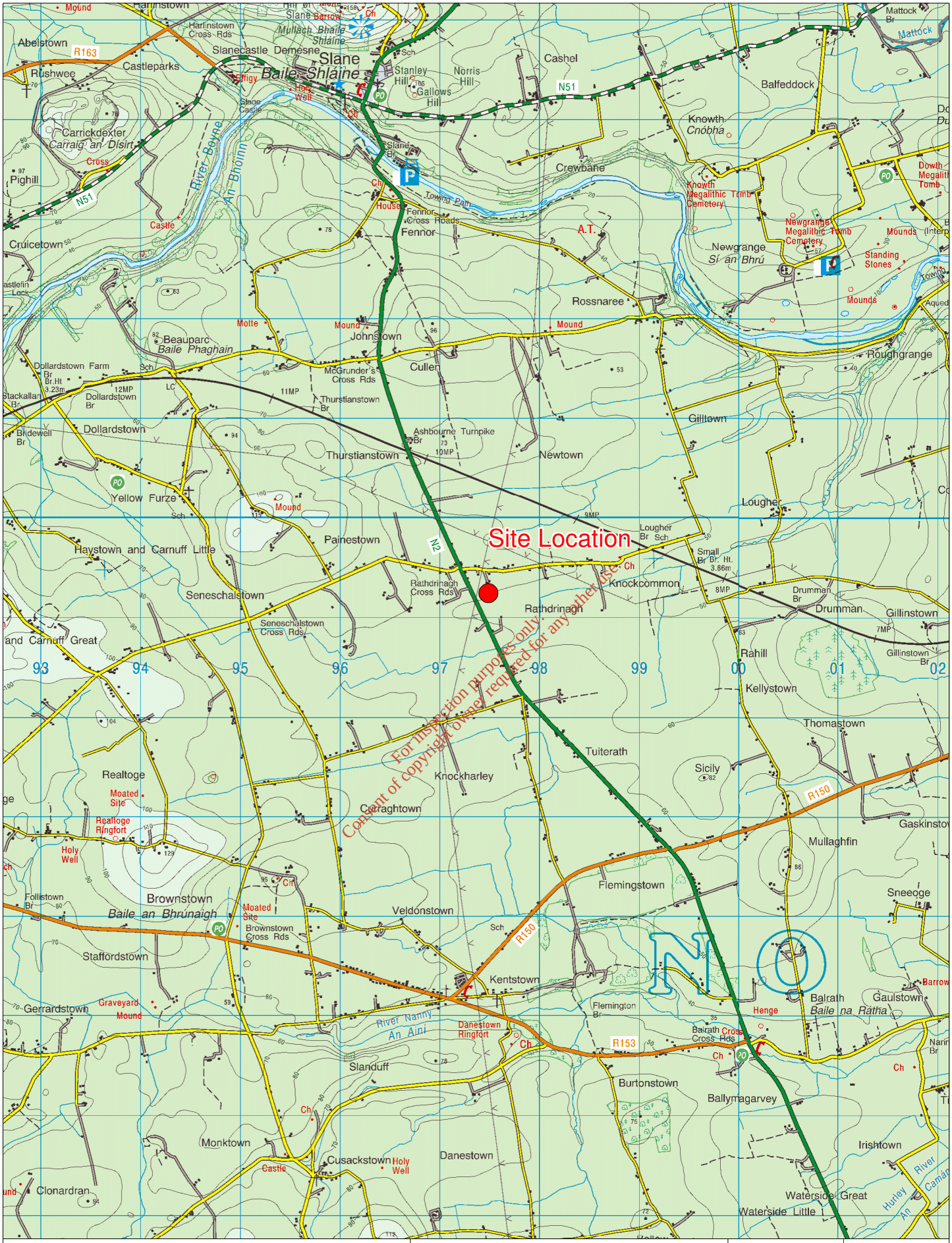
Emergency Procedures to Prevent Unexpected Emissions

PANDA has prepared an Emergency Response Procedure for the facility, which sets out the actions to be taken in an emergency.

Closure, Restoration and Aftercare of the Site

The proposed changes to the current Licence will not affect the measures for the closure, remediation and aftercare of the facility.

DRAWINGS



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email : info@ocallaghanmoran.com
environmental management for business

CLIENT

Panda Waste Services

TITLE

Site Location Map

DETAILS

O.S. Licence Agreement Number AR 0037807

Ordnance Survey Ireland
Government of Ireland

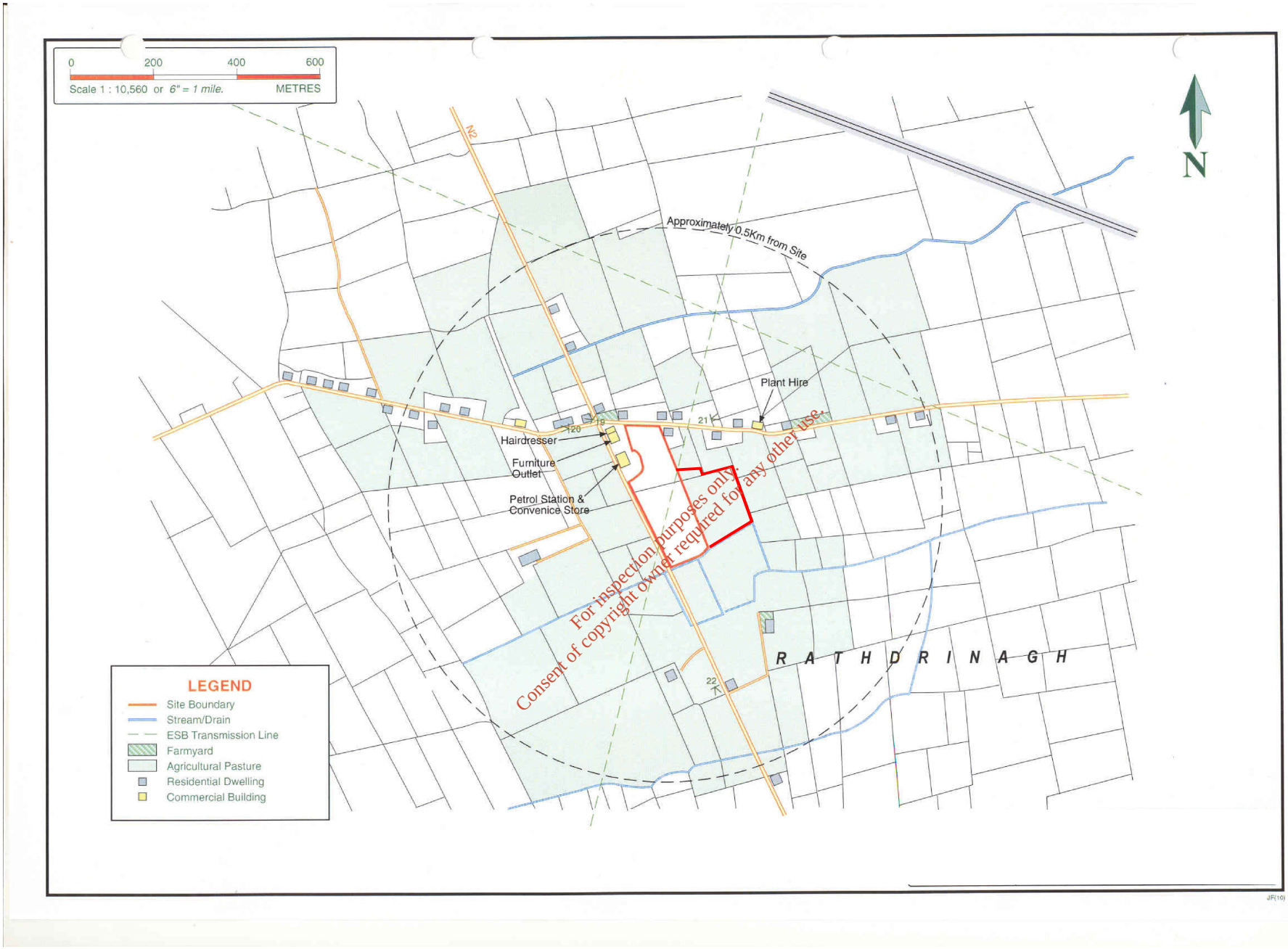
DRG. No.

1

SCALE

1:50,000

REV.



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CLIENT

PANDA Waste Services Ltd

TITLE

Surrounding Landuse

Details

O.S. Licence Agreement number AR 0038707

DRAWING NUMBER

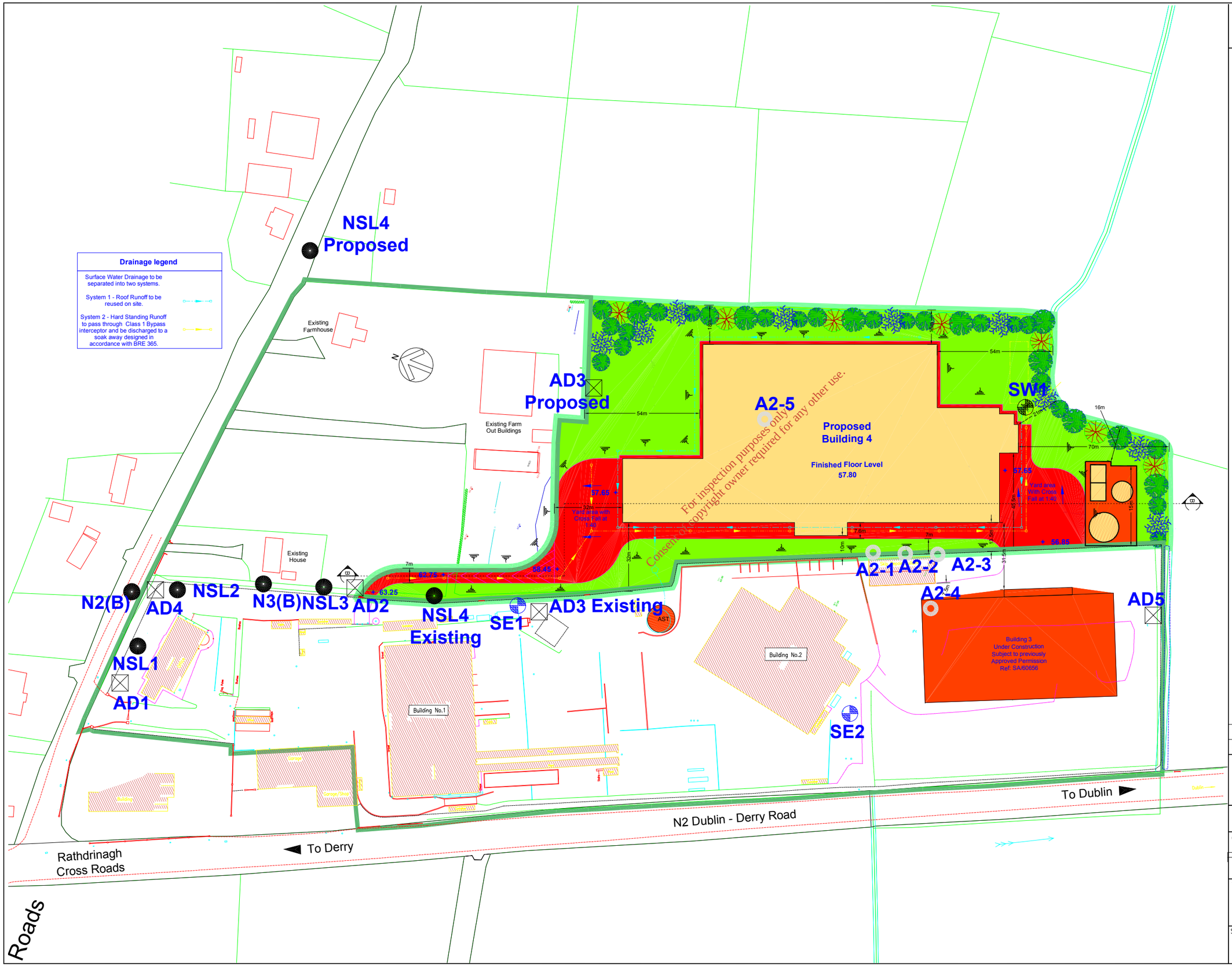
2

Scale

NS

Revision

A



NOTES

LEGEND:

- Denotes Sewer Monitoring Location
- Denotes Surface Emission/Monitoring Location
- Denotes Noise Monitoring Locations
- Denotes Air Emission/Monitoring Point
- Denotes Dust Monitoring point

#	I.D.	EASTING	NORTHING
1	AD-1	297300	269480
2	AD-2	297374	269422
3	AD-3	297481	269324
4	AD-4	297352	269483
5	AD-5	297500	269028
6	NSL-1	297303	269484
7	NSL-2	297357	269479
8	NSL-3	297371	269430
9	NSL-4	297526	269481
10	N2(B)	297351	269487
11	N3(B)	297372	269437
12	SE-1	297406	269316
13	SE-2	297411	269151
14	SW-1	297585	269130
15	A2-1	297491	269163
16	A2-2	297498	269145
17	A2-3	297507	269126
18	A2-4	297481	269139
19	A2-5	297551	269250

REV	DATE	DESCRIPTION	DRN	CHKD	APP
A	18/09/09	ISSUE	MW	JOC	**

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environmental management for business

CLIENT

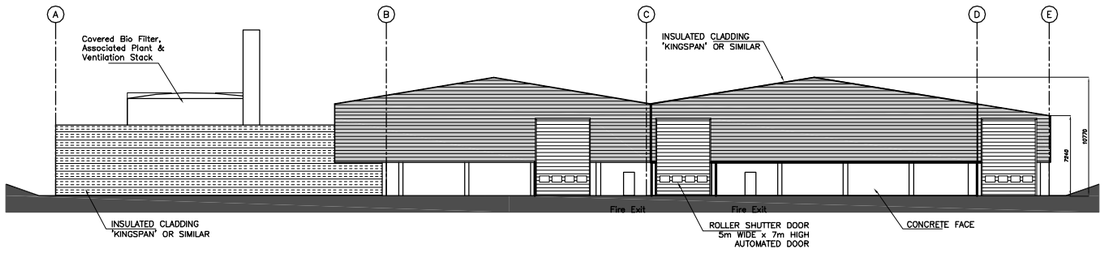
PANDA WASTE SERVICES LTD

TITLE

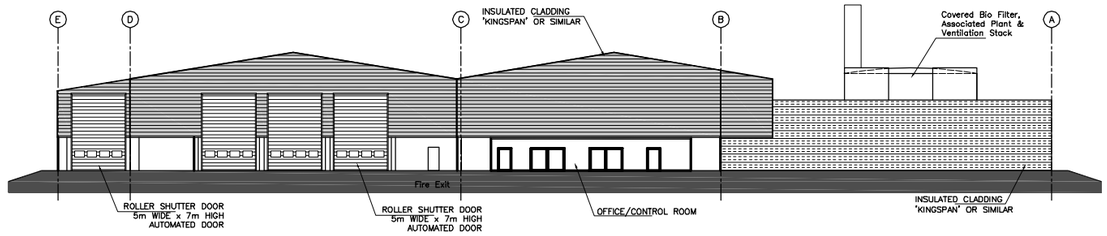
PROPOSED MONITORING & EMISSION LOCATIONS

SCALE	DRAWING No.	REV.
1:600 A3	3	A

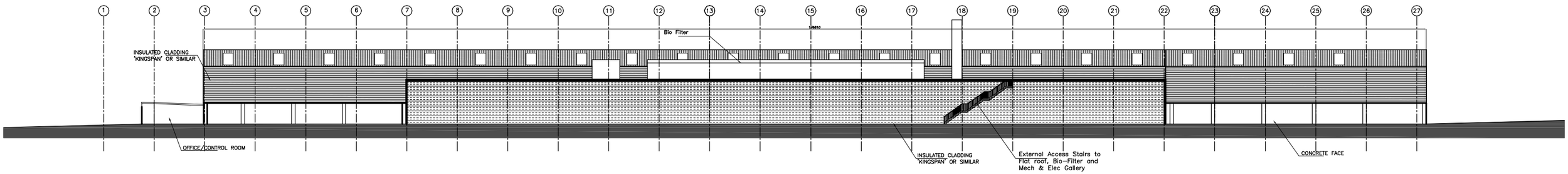
DOS Filename : *********



North Elevation
Scale 1:200



South Elevation
Scale 1:200



East Elevation
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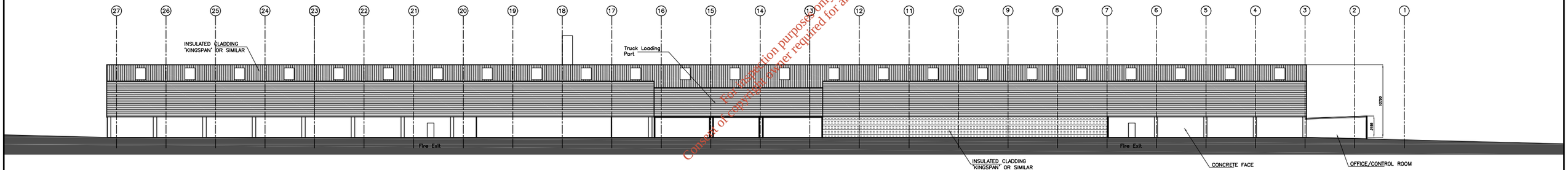
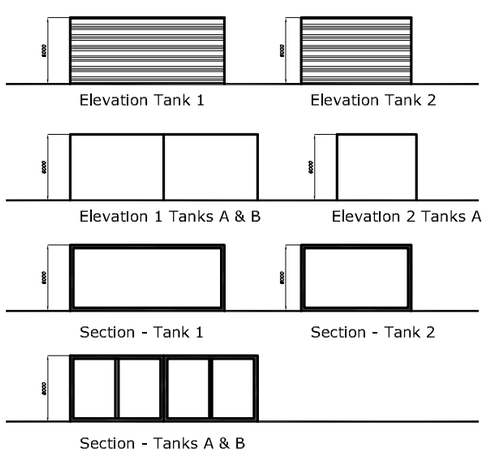
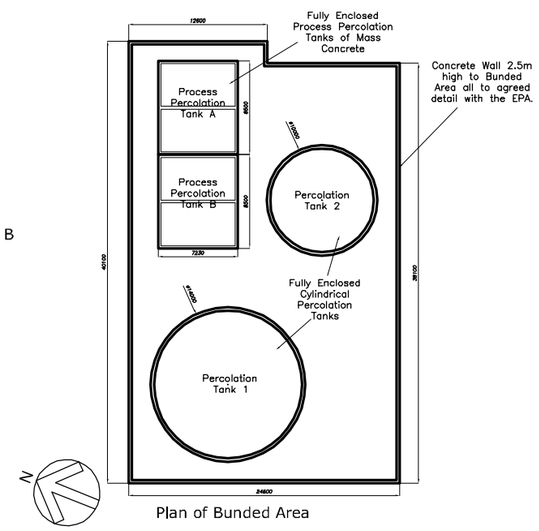


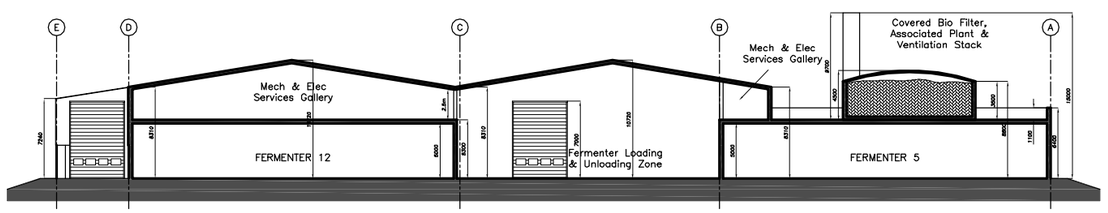
West Elevation
Scale 1:200



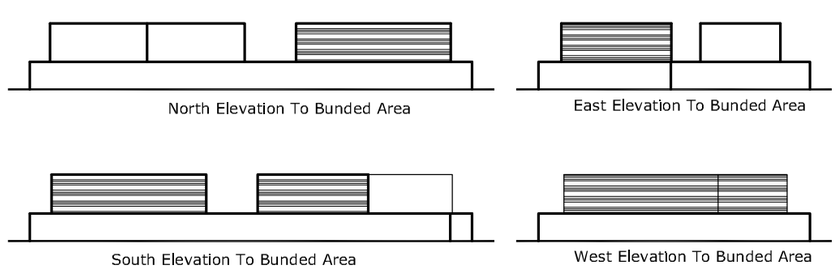
Percolation Tanks
Scale 1:200



Plan of Bunded Area



Section A-A
Scale 1:200



No	REVISION	DATE

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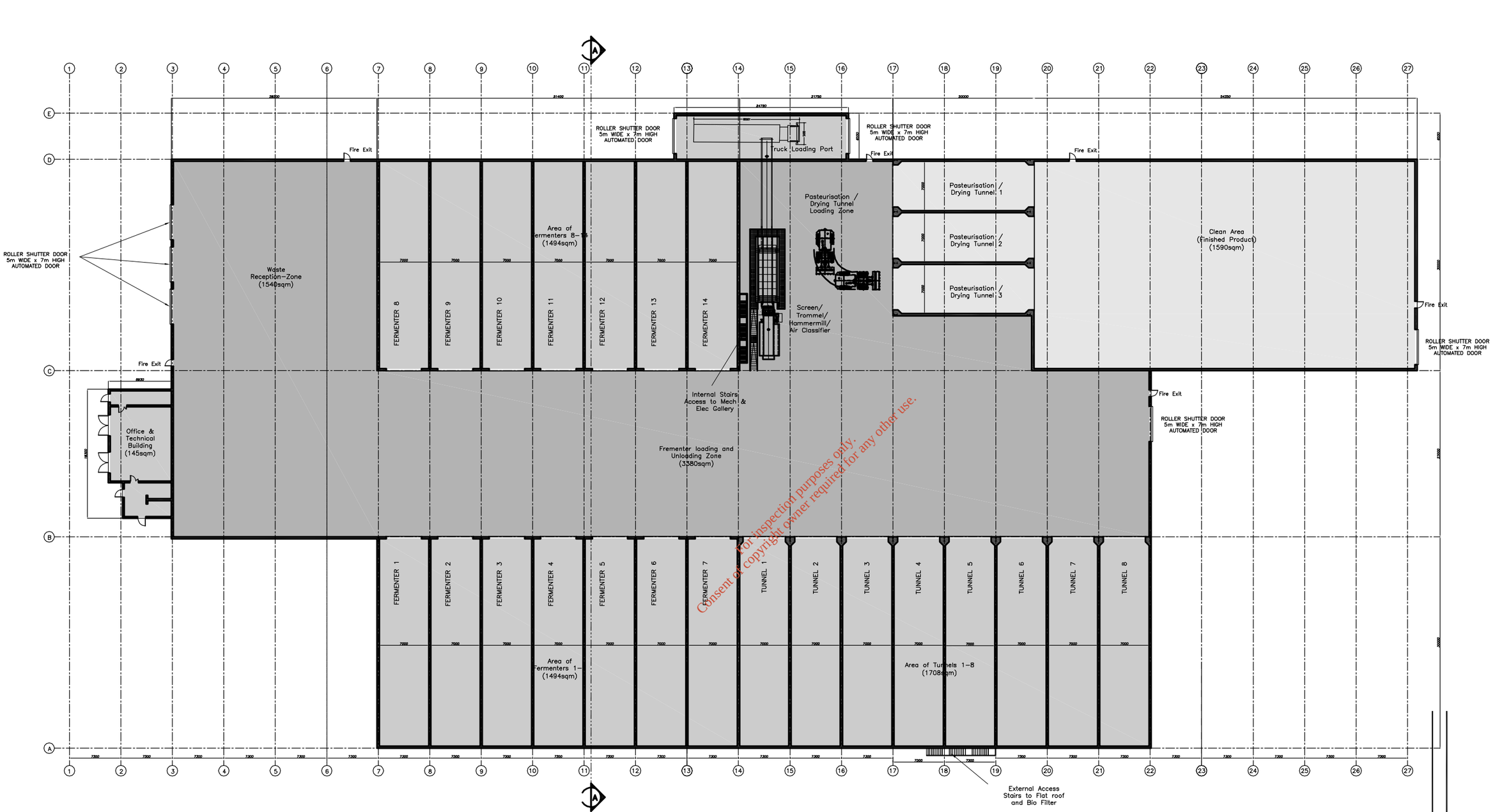
Client: Nurendale Ltd. (PANDA Waste) Rathdrinagh, Beauparc, Navan, Co. Meath.

Job: Phase IV Recycling Facility

Title:	Scale:	Drawn:
Building Elevs & Sec Tank Plan Elev & Sec	1:200 @ A0 1:552 @ A3	S. Hill
Dwg No: 2009-101-201	Rev: Date: Sept 2009	Stage: EPA



General Arrangement Floor Plan

Scale 1:200

No	REVISION	DATE

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Rathdrinagh, Beauparc,
Navan, Co. Meath.

Job:
Phase IV
Recycling Facility

Title:	Scale:	Drawn:
Building Floor Plan	1:200 @ A0 1:552 @ A3	S. Hill
Dwg No: 2009–101–202	Rev.: Date: Sept 2009	Stage: EPA

Roof Plan
Scale 1:200

No	REVISION	DATE

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Navan, Co. Meath.

Job:
Phase IV
Recycling Facility

Title:	Scale:	Drawn:
Building Roof Plan	1:200 @ A0 1:552 @ A3	S. Hill
Dwg No: 2009-101-203 / Rev:	Date: Sept 2009	Stage: EPA

Drainage legend

Surface Water Drainage to be separated into two systems.

System 1 - Roof Runoff to be reused on site.

System 2 - Hard Standing Runoff to pass through Class 1 Bypass Interceptor and be discharged to a soak away designed in accordance with BRE 365.

Site Area
32,000sqm
3.2 Hectares
7.9 Acres

Licence Area

Selected soft landscaping beyond the hard standing areas

See Planting Legend for Proposed planting schedule

Existing Farmhouse

Existing Farm Out Buildings

Existing House

Location of Site Notice #1

1.5m perimeter footpath to Building set 150mm below Finished floor level with ground banked back to existing site levels at a 1:3 fall

54m

Proposed Building
Finished Floor Level
57.80

RAINFALL FROM PAVED AREAS TO SOAK AWAY BRE365 DESIGN

CLASS 1 BY PASS INTERCEPTOR

All Percolation Tanks to be enclosed in a 2.5m high Bunded area to agreed detail with EPA

Process Percolation Tanks A & B

Percolation Tank 2
Ø10m height 6m

Percolation Tank 1
Ø14m height 6m

Ramped Access Road at 1:12 from Top Yard Level to meet existing site levels before joining into existing yard at a Level of 63.15
Ground to be banked from new road / yard back to the existing site levels at a max of 1:3

Access Road to the west side of the building is to be kept at 150mm below the finished floor level with banking to existing site levels to be at a max of 1:3

Yard area with Cross Fall at 1:40

Yard area With Cross Fall at 1:40

+ 57.65

+ 56.85

+ 62.75

+ 58.45

+ 63.25

Skip Repair Building

New Surface water sump chamber and pumping house to pump Rainfall run off from the new roofs to the existing above ground storage tank.

Existing Above Ground Water Storage tank, Rainfall runoff from new roofs to discharge to here for re-use (660m3 capacity)

Building No.1

Building No.2

Building Under Construction
Subject to previously Approved Permission
Ref: SA/60656

Office

Garage

Garage/Shop

Building

Licence Area

Licence Area

Licence Area

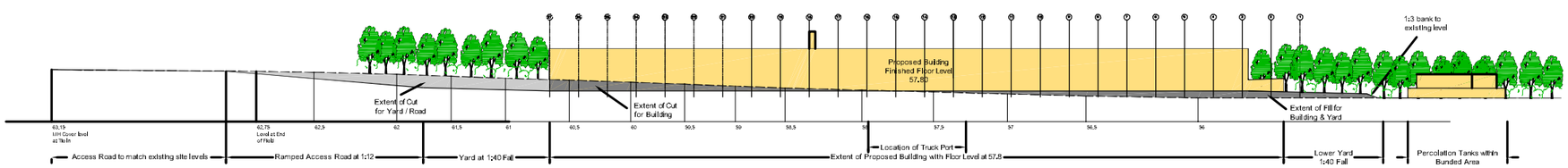
Rathdrinagh Cross Roads

To Derry

N2 Dublin - Derry Road

To Dublin

Location of Site Notice #2



Site Section

No	REVISION	DATE

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Job: Phase IV Recycling Facility

Title:	Scale:	Drawn:
Proposed Site Plan And Site Section	1:500 @ A0 1:1380 @ A3	S. Hill
Dwg No: 2009-101-103	Rev: / Date: Sept 2009	Stage: EPA

Existing Farmhouse

Existing Farm Out Buildings

Proposed Site

Existing House

Skip Repair Building

Building Under Construction

Floor Level 57.05

Building No.2

Building No.1

Garage

Garage/Shop

Building

Garage Forecourt

Rathdrinagh Cross Roads

To Derry

N2 Dublin - Derry Raod

To Dublin

6' FF

No	REVISION	DATE

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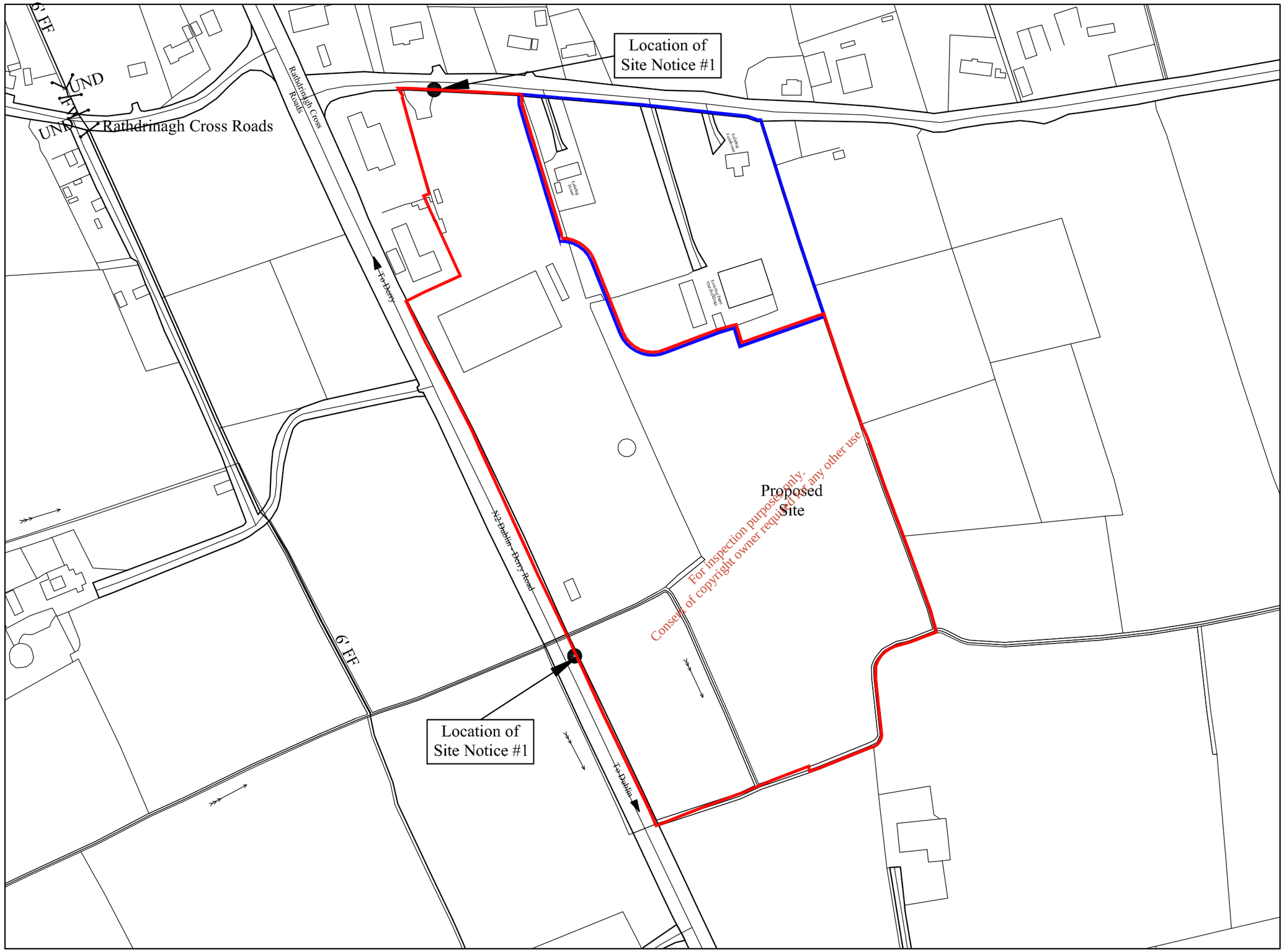
Navan, Co. Meath.

Job:
Phase IV
Recycling Facility

Title	Scale	Drawn
Existing Site Plan And Site Survey	1:500 @ A0 1:1380 @ A3	S. Hill
Dwg No: 2009-101-102	Rev:	Date: Sept 2009
		Stage: EPA



N

ITM Centre Pt. Coords:

697366,769251

Map Series:

1:5000
2441

Revision Date 31-Jul-2004
Survey Date 31-Jul-2000
Levelled Date

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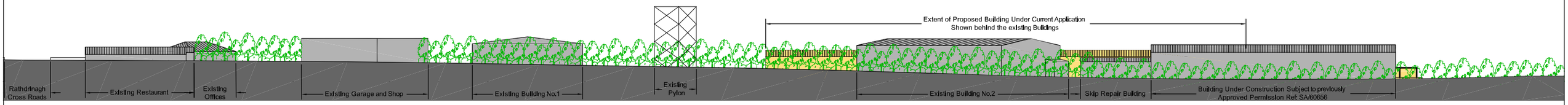
Nurendale Ltd., (PANDA Waste),
Rathdrinagh, Beauparc, Navan, Co. Meath.

Job. Phase IV, Recycling Facility

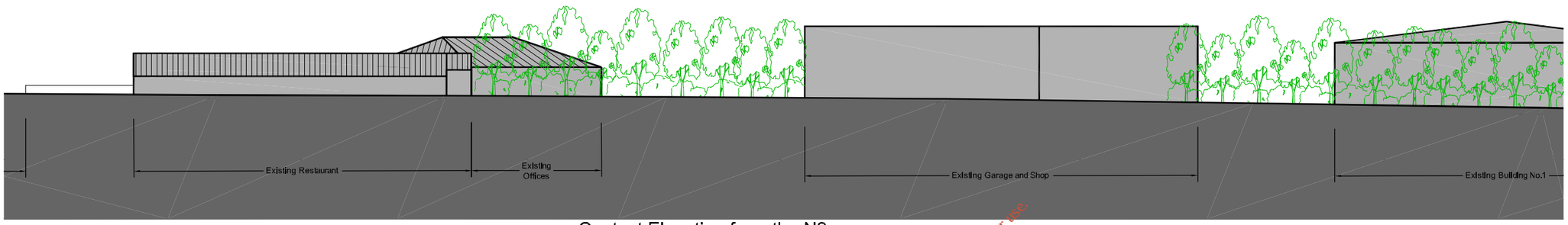
Title Site Location Map

Scale 1:2500
Date Sept 2009
Drawn Stephen Hill
Drg. No. 2009-101-101



Context Elevation from the N2 (West)

Scale 1:500



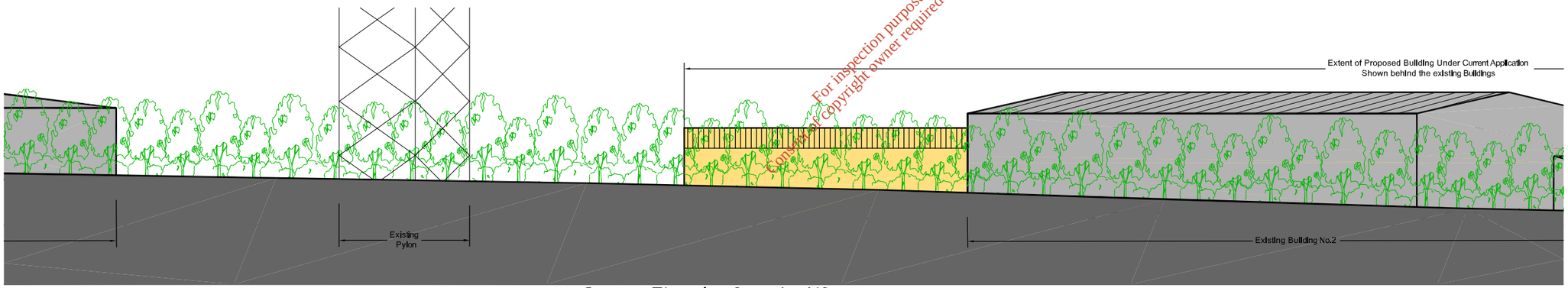
Context Elevation from the N2 (1 of 3)

Scale 1:200

LEGEND

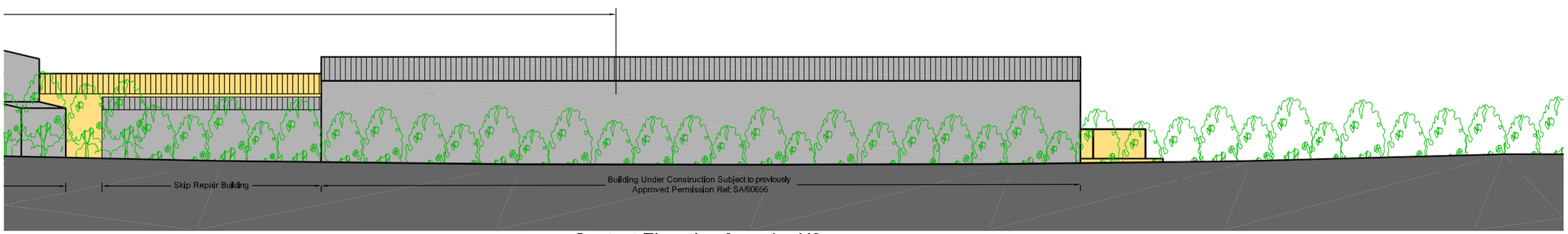
Existing Buildings

Proposed Building



Context Elevation from the N2 (2 of 3)

Scale 1:200



Context Elevation from the N2 (3 of 3)

Scale 1:200

Scales
1:200/500 @ A0
1:552/1380 @ A3

No	REVISION	DATE

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Rathdrinagh, Beauparc,
Navan, Co. Meath.

Job:
Phase IV
Recycling Facility

Title:	Scale:	Drawn:
Context Elevation From The N2	See Above	S. Hill
Dwg No: 2009-101-301 Rev:	Date: Sept 2009	Stage: EPA