



SECTION 1 – INTRODUCTION

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



SECTION 1: INTRODUCTION

CONTENTS

SECTION 1 – INTRODUCTION

1.	Introduction	1-1
1.1	Preamble	1-1
1.2	Planning Permission	1-1
1.3	The EU Waste Framework Directive (2008/98/EC)	1-3
	1.3.1 Application of the Waste Hierarchy to the Grannagh Facility	1-4
1.4	Environmental Impact Statement Legislation	1-5
1.5	Structure and Content of the Environmental Impact Statement	1-6
1.6	The Applicant	1-7
1.7	Existing Waste Authorisation	1-7
1.8	Site Selection and Alternatives	1-12
1.9	Data Necessary to Identify and Assess Environmental Effects of Development	1-12
1.10	Difficulties Compiling Specified Information	1-13
1.11	Forecasting Methods Used to Assess the Effects on the Environment	1-13
1.12	Contributors to the EIS	1-13
1.13	Consultations	1-13
1.14	Appropriate Assessment Screening	1-14
	1.14.1 Background to Appropriate Assessment	1-14
	1.14.2 Findings of Appropriate Assessment Screening	1-15



1. INTRODUCTION

1.1 Preamble

This Environmental Impact Statement (EIS) is being submitted to the Environmental Protection Agency (EPA) by CHI Environmental Ltd., Dunbrinn, Grannagh, Kilmacow, County Kilkenny to accompany an application for a Waste Licence, W0260-01 for an existing inert soil and stone recovery facility and inert construction and demolition (C&D) materials recycling facility at The Quarry, Grannagh, Kilmacow, Co. Kilkenny, National Grid Reference 257881E, 114843N.

The works proposed under the Waste Licence involves the recovery of approximately 125,000 tonnes per annum of inert soil and stones for the purposes of restoring a former rock quarry to beneficial agricultural use, and for the importation and recycling of approximately 45,000 tonnes per annum of inert construction and demolition material for the purposes of re-sale as certifiable secondary (recycled) aggregate for re-use in the construction industry.

CHI Environmental Ltd. commenced recovery and recycling operations at The Quarry at Grannagh in April 2004, when they applied for and were granted a Waste Permit WMP 22/2003 from Kilkenny County Council. The existing permitted site was granted another Waste Permit (No. WMP 23/2007) by Kilkenny County Council in November 2007. In December 2006, full planning permission was granted by Kilkenny County Council for the site recovery activities - Register no. 06/1772.

CHI Environmental Ltd. applied for a Waste Licence (Ref: WO260-01) to the EPA on 13/2/2009 and in accordance with the relevant legislation, they continue to operate under their present Waste Permit (No. WMP 23/2007) under the authority of Kilkenny County Council until the waste licence application is decided upon by the Agency.

The application for Waste Licence W0260-01 is for the continued recovery operations as per the existing Waste Permit, and the application for a Waste Licence creates no proposed significant change to the content, nature, composition or volume of materials intended for recovery at the site as already permitted and authorised by the existing waste permit and planning permission. The sole reason a Waste Licence was applied for, was due to the changes in the National Waste Permit legislation and the obligations which this brought.

1.2 Planning Permission

The activities carried out under the existing Waste Permit Permit WMP 23/2007 and within the Waste Licence Application W0260-01 are covered by Planning Permission: Register no. 06/1772, granted by Kilkenny County Council in 2006. See **Figure 1.2.1** for a copy of the Planning Permission.

In accordance with Section 42(1)(b) of the Waste Management Acts (1996-2013), as inserted by the European Union (Environmental Impact Assessment) (Waste) Regulations 2013 (S.I. No. 505 of 2013), the Agency has requested the applicant to submit an Environmental Impact Statement (EIS), in support of the Waste Licence Application.



Figure 1.2.1: Copy of Planning Permission Ref: 06/1772

KILKENNY COUNTY COUNCIL

PLANNING AND DEVELOPMENT ACT 2000

NOTIFICATION OF DECISION TO GRANT

TO: Mr Robert Murphy
C/o Malone O'Regan
St. Catherines House
Catherine Street
Waterford

Planning Register Number: 06/1772


Valid Application Received: 16/10/2006

Further Information Received Date:

In pursuance of the powers conferred upon them by the above-mentioned Act, Kilkenny County Council has by Order dated 07/12/2006 decided for the reason(s) set out in the First Schedule hereto to GRANT PERMISSION for development as follows:-

to carry out deposition works on a quarry site in accordance with Waste Permit WMP22/2003. The site will be accessed from the Kilmacow Road until the proposed new entrance permitted by P06/246 can be provided. The existing quarry is included in the Record of Protected Structures listed in the 2002 County Development Plan as a Grade 4 industrial archaeology site (RPS Ref D129); for RETENTION of an existing site office, oil storage hut and site works and for permission for a weighbridge, weighbridge office, personnel facilities, oil store and bund and additional site works adjacent to the permitted new entrance AT Granny Kilmacow Co. Kilkenny IN ACCORDANCE WITH THE PLANS, PARTICULARS AND DOCUMENTATION SUBMITTED SUBJECT TO THE 13 NO. CONDITIONS SPECIFIED IN THE SECOND SCHEDULE HERETO, THE REASONS FOR THE IMPOSITION FOR THE SAID CONDITIONS BEING SET OUT IN THE SAID SECOND SCHEDULE.

Signed on behalf of Kilkenny County Council


for DIRECTOR OF SERVICES

Date: 7/12/06

See final page for details of appeal procedures.

Tel no. Planning Section: 056-7794010



1.3 The EU Waste Framework Directive (2008/98/EC)

EU Directive 2008/98/EC was published in the Official Journal of the European Union on 22/11/2008 and was implemented in Ireland as the Waste Management (Waste Framework Directive) Regulations 2011 (S.I No. 126 of 2011). The following paragraphs have a bearing on the existing inert soil and stone recovery facility and inert materials recycling and transfer facility at The Quarry at Grannagh.

The Directive stated that:

- *In its conclusions of 1 July 2004, the Council called on the Commission to bring forward a proposal for the revision of certain aspects of Directive 75/442/EEC, repealed and replaced by Directive 2006/12/EC, in order to clarify the distinction between waste and non-waste and that between recovery and disposal.*
 - *The definitions of recovery and disposal need to be modified in order to ensure a clear distinction between the two concepts, based on a genuine difference in environmental impact through the substitution of natural resources in the economy and recognising the potential benefits to the environment and human health of using waste as a resource.*
 - *It is therefore necessary to revise Directive 2006/12/EC in order to clarify key concepts such as the definitions of waste, recovery and disposal, to strengthen the measures that must be taken in regard to waste prevention, to introduce an approach that takes into account the whole life-cycle of products and materials and not only the waste phase, and to focus on reducing the environmental impacts of waste generation and waste management, thereby strengthening the economic value of waste. Furthermore, the recovery of waste and the use of recovered materials should be encouraged in order to conserve natural resources. In the interests of clarity and readability, Directive 2006/12/EC should be repealed and replaced by a new directive.*
 - *The waste status of uncontaminated excavated soils and other naturally occurring material which are used on sites other than the one from which they were excavated should be considered in accordance with the definition of waste and the provisions on by-products or on the end of waste status under this Directive.*
 - *By 2020, the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of **non-hazardous construction and demolition waste** excluding naturally occurring material defined in category 17 05 04 in the list of waste shall be increased to a minimum of 70 % by weight.*
 - *When certain waste ceases to be waste, laying down end-of-waste criteria that provide a high level of environmental protection and an environmental and economic benefit; possible categories of waste for which 'end-of-waste' specifications and criteria should be developed are, among others, **construction and demolition waste**, some ashes and slags, scrap metals, aggregates, tyres, textiles, compost, waste paper and glass. For the purposes of reaching end-of-waste status, a recovery operation may be as simple as the checking of waste to verify that it fulfils the end-of-waste criteria.*



Under Article 3 of Directive 2008/98/EC the following definitions shall apply:

- *'waste' means any substance or object which the holder discards or intends or is required to discard. This definition is key as it is referred to throughout the Directive as Point (1) of Article 3.*
- *'recovery' means any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. Annex II sets out a non-exhaustive list of recovery operations.*
- *'disposal' means any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy. Annex I sets out a non-exhaustive list of disposal operations.*

The EU Directive 2008/98/EC and Waste Management (Waste Framework Directive) Regulations 2010 provide clear and unambiguous definitions of Waste Disposal and Waste Recovery. Under the 1975 Waste Directive 75/442/EEC, the term "disposal" included "recovery". This outdated Directive has now been repealed.

1.3.1 Application of the Waste Hierarchy to the Grannagh Facility

The following paragraphs provide information to address the requirements of Article 12(1)(v) of the Waste Management Licensing Regulations 2004, as amended, in relation to a description of how the waste hierarchy in Section 21A of the amended Waste Management Acts 1996 to 2011 is applied. This has regard to the requirements of Section 29(A) of the amended Acts in addressing this item.

The waste hierarchy set out by national and European legislation requires that the following priority apply in the development and implementation of waste management policy:

- (i) prevention
- (ii) re-use / preparation for re-use
- (iii) recycling
- (iv) recovery
- (v) disposal.

The waste recovery facility at Grannagh provides for the recovery of excavated inert, uncontaminated soil and recycling, storage and transfer of inert construction and demolition waste.

Inert Soil and Stones

Recovery is defined in the Waste Framework Directive as *'any operation, the principal result of which, is waste serving a useful purpose by replacing materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy'*.



The inert soil material imported to the recovery facility at Grannagh is excavated at construction/development sites or for utilities installation/maintenance. Given that excavation and handling of such materials incurs a cost, it can be implicitly assumed that engineering designers and/or works contractors will avoid or minimise, insofar as possible, the volume of excess soil material excavated in order to execute the planned development or maintenance works.

It can also be implicitly assumed that excess excavated soil material will only be exported off-site where it is not possible to re-use it within the development site or to backfill temporary excavations. Given the limited scale of most demolition projects, inert construction and demolition waste is generally transferred off-site for recovery at permitted or licensed facilities.

Where excavated soil is inert, it can be re-used at off-site locations for practical and beneficial purposes without the need for treatment, processing or other form of recycling. It is therefore evident that where excess inert soil is generated by development or utilities related works and requires to be exported off site, the highest tier activity on the waste hierarchy to which it may be assigned is a waste recovery activity. The proposed backfilling of the site at Grannagh using inert waste soils and its long-term restoration back to agricultural use will achieve a desirable outcome which would not otherwise be possible or would require extensive use of natural soil resources.

Construction and Demolition Waste

Recycling is defined in the Waste Framework Directive as *‘any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes’*. It can generally be taken as a given that demolition of existing structures is only undertaken as necessary to facilitate construction and development projects.

At the Grannagh facility, construction and demolition waste is crushed and screened in order to produce a secondary aggregate which can be recycled, stored and re-sold as a certifiable granular fill product for re-use by the construction industry. In general, recycling of inert construction and demolition waste in this way is the highest tier on the waste hierarchy to which this waste stream can be assigned. **The Grannagh Facility is a vital part of Waste infrastructure to help Ireland meet the targets set for 2020 for C&D Waste under the EU Waste Framework Directive (2008/98/EC).**

1.4 Environmental Impact Assessment Legislation

This Environmental Impact Statement has been prepared in accordance with the following legislation:

- The European Community Directive (85/337/EEC) on Environmental Impact Assessment as amended by Directive 97/11/EC.
- The European Communities (Environmental Impact Assessment) Regulations, 1989 to 1999 as implemented in Ireland. These include European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I. No. 349 of 1989), the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1994 (S.I. No. 84 of 1994), the European Communities (Environmental Impact Assessment) (Amendment)



Regulations, 1996 (S.I. No. 101 of 1996), the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1998 (S.I. No. 351 of 1998), the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1999 (S.I. No. 93 of 1999). These regulations shall be construed as one and may be collectively cited as the European Communities (Environmental Impact Assessment) Regulations 1989 to 1999.

In accordance with Section 40 (2A)(C) of the Waste Management Acts (1996-2013), the EPA has addressed the information submitted for a Waste Licence Application W0260-01 by CHI Environmental Ltd. and considers that the waste licence application must be made subject to an Environmental Impact Assessment (EIA). Therefore in accordance with Section 42 (II)(b) of the Waste Management Acts (1996-2013), CHI Environmental Ltd. hereby submits an Environmental Impact Statement (EIS).

1.5 Structure and Content of the Environmental Impact Statement

An Environmental Impact Statement (EIS) *"means a statement of the effects, if any, which proposed development, if carried out, would have on the environment"*.

This Environmental Impact Statement is presented in the "Grouped Format Structure" as set down in the Environmental Protection Agency (EPA) publication: **Guidelines on the information to be contained in Environmental Impact Statements** (2002).

Due regard has been given in the preparation of this EIS to the requirements of Article 94 contained in Schedule 6 of the Planning and Development Regulations, 2001 (S.I. 600 of 2001) – *"Information to be Contained in an EIS"*.

This EIS is sub-divided into four distinct sections, each with a number of sub-sections. As an overview they comprise of:

- **Section 1 - Introduction**

Background to the application site and operator with a preamble and introduction to the EIS. This section also includes pre-application consultations and legal requirements followed.

- **Section 2 – Description Of The Proposed Development**

A detailed description of the proposed development, including information on the site, design and size of the proposed development. This also includes operational considerations and final restoration schemes. This section also identifies the data required to assess the main effects which the development is likely to have on the environment.



▪ **Section 3 – The Existing Environment, Environmental Impacts and Mitigation Measures**

Detailed information on aspects of the existing environment, identifying potential impacts on the environment by the proposed development, and recommends mitigation measures to reduce or eliminate these impacts. They are grouped under the following sub-sections:

- Scoping Report
- Flora and Fauna
- Water
- Climate, Air Quality and Dust
- Noise
- Hydrogeology – Geology, Groundwater and Soils
- Cultural Heritage
- Human Beings and Material Assets
- Landscape and Visual Assessment
- Interaction of the Foregoing

▪ **Section 4 – Non-Technical Summary**

A summary in non-technical language of the information contained within the EIS.

1.6 The Applicant

CHI Environmental Ltd is a local County Kilkenny family owned/operated company, which provides employment to ca. 8 no. people in the Kilmacow area. The company principal activity is the recovery of a disused rock quarry on lands owned by Bob Murphy one of the company Directors. This authorised activity has been ongoing since 2004.

CHI Environmental Ltd are a long-term member of the Soil Recovery Association (SRA) which is a National Organisation affiliated to the Construction Industry Federation (CIF) which represents Members involved in the excavation, transport and recovery of soil and stones at authorised permitted and licensed soil and stone recovery facilities.

The SRA has been instrumental in preparing the new EPA Waste Licence Form and Guidance Notes for Waste Soils Recovery Facilities in conjunction with the EPA. In this regard, the SRA had had extensive discussions with the EPA concerning the implementation of the new Regulations including meetings on 12/6/2008 and more recently on 29/1/2009.

1.7 Existing Waste Authorisation

CHI Environmental Ltd. commenced recovery and recycling operations at The Quarry at Grannagh in April 2004, when they applied for and were granted a Waste Permit WMP 22/2003 from Kilkenny County Council. The existing permitted site was granted another Waste Permit (No. WMP 23/2007) by Kilkenny County Council in November 2007 (see **Figure 1.7.1**) In December 2006 full planning permission was granted by Kilkenny County Council for the site recovery activities.



Figure 1.7.1: Copy of Existing Waste Permit WMP023/2007 in Force

Kilkenny County Council
Comhairle Chontae Chill Chainnigh



**WASTE PERMIT UNDER WASTE MANAGEMENT (PERMIT)
REGULATIONS 1998 (S.I. No. 165 of 1998)**

Permit Holder: - Crystalhill Inns Limited
Site Location: - Granny,
Kilmacow,
Co. Kilkenny

Permit Reference: - WMP023/2007

Kilkenny County Council in the exercise of the powers conferred on it by Article 5 of the Waste Management (Permit) Regulations 1998 hereby grants a permit for the recovery of waste (other than hazardous) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time) to : -

Crystalhill Inns Limited
Dunbrinn
Kilmacow
Co. Kilkenny

in accordance with the plans and particulars furnished with the application WMP 023/2007 received on the 1st June 2007 and 1st October 2007 & 12th October 2007, subject to 11 no. conditions per the attached schedule of conditions.

Dated this 26th day of Nov., 2007


Delegated Officer

Order No. 603



The two Waste Permits granted to date on site (as far back as April 2004), were granted under the Waste Management (Permit) Regulations, 1998 by Kilkenny County Council and authorised CHI Environmental Ltd. to carry out the following waste recovery activities under the Fourth Schedule of the Waste Management Act 1996 (as amended):

1.4 Activities licensed in accordance with the 4th Schedule of the Waste Management Acts 1996 to 2003:

- 2. Recycling or reclamation of organic substances which are not used as solvents.
- 4. Recycling or reclamation of other inorganic materials.
- 10. Spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system, including composting and other biological transformation process
- 12. Exchange of waste for submission to 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.

Existing and proposed inert waste recovery activities (including for the purposes of Improvement or Development of Land) which may have previously operated under a Waste Permit under the Waste Management (Permit) Regulations, 1998 became subject to the Waste Management (Facility Permit and Registration) Regulations 2007 (S.I 821 of 2007) as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations 2008 (S.I. No. 86 of 2008) as from 1st June 2008.

These new Regulations set out new thresholds for inert waste recovery facilities and in particular for operating under Waste Facility Permits. This is set out under Class 5 and Class 6 of Part 1 of the Third Schedule of the Waste Management (Facility Permit and Registration) Regulations 2007 (S.I 821 of 2007) as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations 2008 (S.I. No. 86 of 2008). These regulations set out time scales and requirements for inert waste recovery facilities that were above the new thresholds to apply to the EPA for a Waste Licence.

The new thresholds for Waste Facility Permits were as follows: Class 5: *Recovery of excavation or dredge spoil, comprising natural materials of clay, silt, sand, gravel or stone and which comes within the meaning of inert waste, through deposition for the purposes of the improvement or development of land, where the total quantity of waste recovered at the facility is less than 100,000 tonnes.*

Class 6: *Recovery of inert waste (other than excavations or dredgings comprising natural materials of clay, silt, sand, gravel or stone) through deposition for the purposes of the improvement or development of land, where the total quantity of waste recovered at the facility is less than 50,000 tonnes.*

The new Regulations set out a period of 180 working days from the 1st June 2008 for all existing soil and stone recovery facilities whose threshold exceeds 100,000 tonnes to either cease operations by 13th February 2009 or else have applied to the EPA for a Waste Licence prior to the 13th February 2009. The EPA wrote out to many existing facilities on 31/10/2008 asking operators to confirm which of three following options they would be adopting:



1. Apply to the EPA for a licence prior to the 13th February 2009 or before the expiration of your current permit (whichever is sooner).
2. Reduce your capacity below 100,000 tonnes threshold and continue to operate under a permit issued by the Local Authority.
3. Cease the activity by 13th February 2009.

CHI Environmental Ltd. applied for a Waste Licence (Ref: WO260-01) to the EPA on 13/2/2009 and in accordance with the relevant legislation, they continue to operate under their Waste Permit (No. WMP 23/2007) until this licence is decided upon by the Agency. This is explained by the following legislation and is also confirmed in **Figure 1.7.2: Correspondence from EPA with regards to status of Grannagh Facility.**

The Waste Management (Facility Permit and Registration) Regulations 2007 (S.I 821 of 2007) as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations 2008 (S.I. No. 86 of 2008) state in Article 3 (2) and (4) that:

3. (2) The provisions of the Regulations revoked shall, notwithstanding sub-article (1), continue to apply and have effect in relation to any application that is made for a waste permit or a certificate of registration, or any waste permit or certificate of registration which has been granted, before the coming into operation of these Regulations.

(4) A waste permit granted under the Regulations revoked in respect of an activity which does not fall within part I of the third schedule and which requires a waste licence in accordance with the Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004), as may be amended from time to time, shall remain valid if an application for a waste licence is made to the Agency within 180 working days of the coming into operation of these Regulations, until such time as a decision is taken to grant or to refuse a waste licence under article 34 of the Waste Management (Licensing) Regulations 2004, as may be amended from time to time, at which point the waste facility permit will lapse.

The above legislation further confirms that the existing Waste Permitted Facility at Grannagh operating under Waste Permit WMP 23/2007 will continue to be subject to the Waste Management (Permit) Regulations, 1998 (until such time as the Waste Licence is granted) as this Permit was granted under the 1998 Regulations, prior to the coming into effect of the newer Waste Facility Permit Regulations of 2007/2008.



Figure 1.7.2: Correspondence from EPA with Regards to Status of Grannagh Facility



Headquarters, PO Box 3000
Johnstown Castle Estate
County Wexford, Ireland
Ceanntechní, Bosa Poist 3000
Easáil Chaisleán Bhaile Sheáin
Contae Loch Garman, Éire
T: +353 53 916 0600
F: +353 53 916 0699
E: info@epa.ie
W: www.epa.ie
LoCall 1890 33 55 99

Mr. Patrick Murphy
CHI Environmental Ltd.
Dunbrinn
Grannagh
Kilmacow
Via Waterford

22 June 2011

Re. Waste Licence Application Register Number W0260-01

Dear Mr. Murphy,

Waste licence application register number W0260-01 was submitted to the Agency on 13/02/2009 and as such Article 34 of the Waste Management (Facility Permit and Registration) Regulations 2007, as amended, applies. The waste facility permit in force at the time the waste licence was submitted shall remain valid until such time as a decision is taken to grant or to refuse a waste licence under article 34 of the Waste Management (Licensing) Regulations 2004 at which point the waste facility permit will lapse.

Yours sincerely

Caroline Connell
Inspector
Environmental Licensing Programme
Office of Climate, Licensing and Resource Use



1.8 Site Selection and Alternatives

The existing inert materials recovery site at Grannagh has been up and running since it was granted a Waste Permit back in April 2004. During the past ca. 10 years of operation under a Waste Permit, the facility has never been the subject of any complaints or enforcement issues as proven by Local Authority (Kilkenny County Council) records.

Furthermore the compliance monitoring is all up to date and is all compliant with the Permit requirements and therefore indicates that the existing inert soil and stone recovery facility and inert materials recycling and transfer facility at The Quarry, Grannagh has not had any detrimental impact on the environment.

Therefore, as an established authorised site which has undergone a full assessment by the Local Authority, it was not necessary to carry out a site selection study as would be required for a “green-field” site.

Furthermore, a soil recovery facility for the consequential benefit to agriculture can only be sited where the need arises as in this case with the disused rock quarry at Grannagh.

It is not appropriate therefore to identify and appraise the merits of alternative candidate sites for the proposed waste recovery activities.

The use of inert soil and stone in the recovery activity is the most suitable material for the as it prevents the use of primary aggregates such as quarried rock and therefore protects valuable rock reserves and meets the targets set in The EU Waste Directive 2008/98/EC.

At all stages of the site design and site operation, alternative techniques, equipment and machinery have been considered and employed where appropriate to ensure that the continued operation of the existing inert soil and stone recovery facility and inert C&D materials recycling facility at The Quarry, Grannagh does not have any significant negative impacts upon the environment.

1.9 Data Necessary to Identify and Assess Environmental Effects of Development

The data necessary to identify and assess the environmental effects of the development are:

- (i) The existing environment, as described in Section 3.
- (ii) The characteristics of the development as described in Section 2, including its size and scale, processes involved and the emissions from the existing licensed soil recovery facility.
- (iii) The potential environmental effects of the project are assessed and proposed mitigation measures are presented in Section 3.

Information on all aspects of the environment was obtained from published information and from specially commissioned field surveys.



1.10 Difficulties Compiling Specified Information

Baseline information for the existing site and its environment was readily compiled by the EIS contributors and no such difficulties were found.

1.11 Forecasting Methods Used to Assess the Effects on the Environment

The methods employed to forecast the effects on the various aspects of the environment are standard techniques used in the professional disciplines. The general procedure employed was to describe the receiving environment in a dynamic fashion, to add to that a projection of the loading placed on all aspects of the environment by the development in its mitigated form and thereby arrive at the net likely significant effect of the development on the environment.

1.12 Contributors to the EIS

The preparation and co-ordination of this Environmental Impact Statement on behalf of CHI Environmental Ltd. has been undertaken by Mr. Freddie P.R. Symmons B.Env.Sc. (HONS) MCIEEM – Senior Environmental Consultant of Kingfisher Environmental Consultants and Full Member of the Chartered Institute of Ecology and Environmental Management.

Kingfisher Environmental Consultants Kingfisher Environmental Consultants have prepared and lodged in excess of 70 waste permit applications in Ireland for land reclamation activities, and inert material recycling facilities. This particular experience dates back to 1998. In addition we have vast experience in Environmental Impact Assessment and preparation of EIS's and planning applications for land reclamation activities and inert materials recovery facilities.

Kingfisher Environmental Consultants formed and established the Soil Recovery Association (SRA) in Ireland in 2005 and are lead consultants to this industry led organisation. Extensive representations were made in 2005 and 2008 to the Department of Environment concerning the now enacted Waste Management (Facility Permit and Registration) Regulations 2007 (S.I 821 of 2007) as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations 2008 (S.I 821 of 2007).

Furthermore Kingfisher Environmental Consultants assisted (on behalf of the Soil Recovery Association) with the drafting of the New EPA Waste Licence form for soil recovery facilities and also assisted in the preparation of the Guidance Note for Soil Recovery Activities.

1.13 Consultations

In preparing this Environmental Impact Statement, a number of organisations provided services/information which has been used in the compilation of this EIS. These included:

- Kilkenny County Council
- Environmental Protection Agency
- Inland Fisheries Ireland
- Department of the Environment
- Geological Survey Of Ireland



- Meteorological Service, Dublin
- National Parks and Wildlife Service
- OPW - Archaeology Section
- Ordnance Survey Ireland
- Roger Goodwillie & Associates – Ecologist and MCIEEM.

Other consultations and informal discussion held by contributors in undertaking their environmental impact assessments are detailed in the specialist environmental sections of the EIS, together with details of relevant archives and documentation held by state agencies and organisations

1.14 Appropriate Assessment Screening

1.14.1 Background to Appropriate Assessment

As part of the application for a Waste Licence (W0260-01) that was made to the EPA in February 2009 the EPA requested further information on 28/2/2014 under Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations.

CHI Environmental Ltd. were requested by the Environmental Protection Agency (EPA) to Screen for Appropriate Assessment for the existing Waste Recovery Facility at The Quarry at Grannagh.

In June 2014, Roger Goodwillie & Associates on behalf of CHI Environmental Ltd., carried out an Appropriate Assessment Screening Statement which was submitted to the Agency in support of the Waste Licence Application. This is referred to in the Flora and Fauna Section.

With the introduction of the Birds Directive in 1979 and the Habitats Directive in 1992 came the obligation to establish the Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the EU. In Ireland, the Natura 2000 network of European sites comprises Special Areas of Conservation (SAC's) and Special Protection Areas (SPA's).

Appropriate Assessment (AA) involves a case-by-case examination of the implications of a development for the Natura 2000 site and its conservation objectives. This may be presented in the form of a Natura Impact Statement. In general terms, implicit in Article 6(3) of the Habitats Directive is an obligation to put concern for potential effects on Natura 2000 sites at the forefront of every decision made in relation to plans and projects at all stages.

Screening for Appropriate Assessment is the first stage and critical test of Appropriate Assessment and the question is asked whether the development is considered to have a significant impact on the designated Natura 2000 site. The purpose of screening is to determine, on the basis of a preliminary assessment and objective criteria, whether:

- i) a plan or project is directly connected to or necessary for the management of the site, and ii) whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a Natura 2000 site in view of the site's conservation objectives.



As most projects will not be related to point (i) above, this will virtually always be irrelevant but with regards to point (ii) if the answer is no then the process is complete and full appropriate assessment is not required. Screening therefore is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3) of the Habitats Directive.

1.14.2 Findings of Appropriate Assessment Screening

CHI Environmental Ltd., Dunbrinn, Grannagh, Kilmacow, County Kilkenny operate an existing inert soil and stone recovery facility and inert C&D materials recycling facility at The Quarry, Grannagh, Kilmacow, Co. Kilkenny. To that end, the Appropriate Assessment Screening Report considers whether any activity or proposed increase in activity on the lands, either individually or in combination with other plans or projects is likely to have a significant effect on Natura 2000 sites, in view of best scientific knowledge and the conservation objectives of the site(s).

The Appropriate Assessment Screening Report finds that:

“The site does not contain any of the habitats or species that are the special interests of the cSAC and therefore it cannot act as a reservoir to replenish the Natura 2000 site in the event of loss. The only possible impact would be through site drainage reaching the estuary in significant quantities and carrying some kind of detrimental matter. The organisms that occur in the nearest section of river are sea lamprey, river lamprey, the Atlantic salmon, Twaité shad and otter. The fish migrate through the estuary to breed upstream while the otter is resident, feeding on many species of fish and on frogs.”

The Appropriate Assessment Screening Report findings are discussed further in Section 3.2 of the EIS and it concludes that:

“The protective measures built into the design and operation of the facility will prevent this project having any significant effect on the Natura 2000 site – the Lower River Suir (Site Code 2137) – or its conservation objectives. This applies both to the on-going operation phase and final restoration. Since this is the case there is no likelihood of ‘in combination’ effects on the Natura site Network”.

Therefore the site can be screened out of further stages of Appropriate Assessment.



1. INTRODUCTION

1.1 Preamble

This Environmental Impact Statement (EIS) is being submitted to the Environmental Protection Agency (EPA) by CHI Environmental Ltd., Dunbrinn, Grannagh, Kilmacow, County Kilkenny to accompany an application for a Waste Licence, W0260-01 for an existing inert soil and stone recovery facility and inert construction and demolition (C&D) materials recycling facility at The Quarry, Grannagh, Kilmacow, Co. Kilkenny, National Grid Reference 257881E, 114843N.

The works proposed under the Waste Licence involves the recovery of approximately 125,000 tonnes per annum of inert soil and stones for the purposes of restoring a former rock quarry to beneficial agricultural use, and for the importation and recycling of approximately 45,000 tonnes per annum of inert construction and demolition material for the purposes of re-sale as certifiable secondary (recycled) aggregate for re-use in the construction industry.

CHI Environmental Ltd. commenced recovery and recycling operations at The Quarry at Grannagh in April 2004, when they applied for and were granted a Waste Permit WMP 22/2003 from Kilkenny County Council. The existing permitted site was granted another Waste Permit (No. WMP 23/2007) by Kilkenny County Council in November 2007. In December 2006, full planning permission was granted by Kilkenny County Council for the site recovery activities - Register no. 06/1772.

CHI Environmental Ltd. applied for a Waste Licence (Ref: WO260-01) to the EPA on 13/2/2009 and in accordance with the relevant legislation, they continue to operate under their present Waste Permit (No. WMP 23/2007) under the authority of Kilkenny County Council until the waste licence application is decided upon by the Agency.

The application for Waste Licence W0260-01 is for the continued recovery operations as per the existing Waste Permit, and the application for a Waste Licence creates no proposed significant change to the content, nature, composition or volume of materials intended for recovery at the site as already permitted and authorised by the existing waste permit and planning permission. The sole reason a Waste Licence was applied for, was due to the changes in the National Waste Permit legislation and the obligations which this brought.

1.2 Planning Permission

The activities carried out under the existing Waste Permit Permit WMP 23/2007 and within the Waste Licence Application W0260-01 are covered by Planning Permission: Register no. 06/1772, granted by Kilkenny County Council in 2006. See **Figure 1.2.1** for a copy of the Planning Permission.

In accordance with Section 42(1)(b) of the Waste Management Acts (1996-2013), as inserted by the European Union (Environmental Impact Assessment) (Waste) Regulations 2013 (S.I. No. 505 of 2013), the Agency has requested the applicant to submit an Environmental Impact Statement (EIS), in support of the Waste Licence Application.



Figure 1.2.1: Copy of Planning Permission Ref: 06/1772

KILKENNY COUNTY COUNCIL
PLANNING AND DEVELOPMENT ACT 2000
NOTIFICATION OF DECISION TO GRANT

TO: Mr Robert Murphy
C/o Malone O'Regan
St. Catherines House
Catherine Street
Waterford

Planning Register Number: 06/1772


Valid Application Received: 16/10/2006

Further Information Received Date:

In pursuance of the powers conferred upon them by the above-mentioned Act, Kilkenny County Council has by Order dated 07/12/2006 decided for the reason(s) set out in the First Schedule hereto to GRANT PERMISSION for development as follows:-

to carry out deposition works on a quarry site in accordance with Waste Permit WMP22/2003. The site will be accessed from the Kilmacow Road until the proposed new entrance permitted by P06/246 can be provided. The existing quarry is included in the Record of Protected Structures listed in the 2002 County Development Plan as a Grade 4 industrial archaeology site (RPS Ref D129); for RETENTION of an existing site office, oil storage hut and site works and for permission for a weighbridge, weighbridge office, personnel facilities, oil store and bund and additional site works adjacent to the permitted new entrance AT Granny Kilmacow Co. Kilkenny IN ACCORDANCE WITH THE PLANS, PARTICULARS AND DOCUMENTATION SUBMITTED SUBJECT TO THE 13 NO. CONDITIONS SPECIFIED IN THE SECOND SCHEDULE HERETO, THE REASONS FOR THE IMPOSITION FOR THE SAID CONDITIONS BEING SET OUT IN THE SAID SECOND SCHEDULE.

Signed on behalf of Kilkenny County Council


for **DIRECTOR OF SERVICES**

Date: 7/12/06

See final page for details of appeal procedures.

Tel no. Planning Section: 056-7794010



1.3 The EU Waste Framework Directive (2008/98/EC)

EU Directive 2008/98/EC was published in the Official Journal of the European Union on 22/11/2008 and was implemented in Ireland as the Waste Management (Waste Framework Directive) Regulations 2011 (S.I No. 126 of 2011). The following paragraphs have a bearing on the existing inert soil and stone recovery facility and inert materials recycling and transfer facility at The Quarry at Grannagh.

The Directive stated that:

- *In its conclusions of 1 July 2004, the Council called on the Commission to bring forward a proposal for the revision of certain aspects of Directive 75/442/EEC, repealed and replaced by Directive 2006/12/EC, in order to clarify the distinction between waste and non-waste and that between recovery and disposal.*
 - *The definitions of recovery and disposal need to be modified in order to ensure a clear distinction between the two concepts, based on a genuine difference in environmental impact through the substitution of natural resources in the economy and recognising the potential benefits to the environment and human health of using waste as a resource.*
 - *It is therefore necessary to revise Directive 2006/12/EC in order to clarify key concepts such as the definitions of waste, recovery and disposal, to strengthen the measures that must be taken in regard to waste prevention, to introduce an approach that takes into account the whole life-cycle of products and materials and not only the waste phase, and to focus on reducing the environmental impacts of waste generation and waste management, thereby strengthening the economic value of waste. Furthermore, the recovery of waste and the use of recovered materials should be encouraged in order to conserve natural resources. In the interests of clarity and readability, Directive 2006/12/EC should be repealed and replaced by a new directive.*
 - *The waste status of uncontaminated excavated soils and other naturally occurring material which are used on sites other than the one from which they were excavated should be considered in accordance with the definition of waste and the provisions on by-products or on the end of waste status under this Directive.*
 - *By 2020, the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of **non-hazardous construction and demolition waste** excluding naturally occurring material defined in category 17 05 04 in the list of waste shall be increased to a minimum of 70 % by weight.*
 - *When certain waste ceases to be waste, laying down end-of-waste criteria that provide a high level of environmental protection and an environmental and economic benefit; possible categories of waste for which 'end-of-waste' specifications and criteria should be developed are, among others, **construction and demolition waste**, some ashes and slags, scrap metals, aggregates, tyres, textiles, compost, waste paper and glass. For the purposes of reaching end-of-waste status, a recovery operation may be as simple as the checking of waste to verify that it fulfils the end-of-waste criteria.*



Under Article 3 of Directive 2008/98/EC the following definitions shall apply:

- *'waste' means any substance or object which the holder discards or intends or is required to discard.* This definition is key as it is referred to throughout the Directive as Point (1) of Article 3.
- *'recovery' means any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. Annex II sets out a non-exhaustive list of recovery operations.*
- *'disposal' means any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy. Annex I sets out a non-exhaustive list of disposal operations.*

The EU Directive 2008/98/EC and Waste Management (Waste Framework Directive) Regulations 2010 provide clear and unambiguous definitions of Waste Disposal and Waste Recovery. Under the 1975 Waste Directive 75/442/EEC, the term "disposal" included "recovery". This outdated Directive has now been repealed.

1.3.1 Application of the Waste Hierarchy to the Grannagh Facility

The following paragraphs provide information to address the requirements of Article 12(1)(v) of the Waste Management Licensing Regulations 2004, as amended, in relation to a description of how the waste hierarchy in Section 21A of the amended Waste Management Acts 1996 to 2011 is applied. This has regard to the requirements of Section 29(A) of the amended Acts in addressing this item.

The waste hierarchy set out by national and European legislation requires that the following priority apply in the development and implementation of waste management policy:

- (i) prevention
- (ii) re-use / preparation for re-use
- (iii) recycling
- (iv) recovery
- (v) disposal.

The waste recovery facility at Grannagh provides for the recovery of excavated inert, uncontaminated soil and recycling, storage and transfer of inert construction and demolition waste.

Inert Soil and Stones

Recovery is defined in the Waste Framework Directive as *'any operation, the principal result of which, is waste serving a useful purpose by replacing materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy'*.



The inert soil material imported to the recovery facility at Grannagh is excavated at construction/development sites or for utilities installation/maintenance. Given that excavation and handling of such materials incurs a cost, it can be implicitly assumed that engineering designers and/or works contractors will avoid or minimise, insofar as possible, the volume of excess soil material excavated in order to execute the planned development or maintenance works.

It can also be implicitly assumed that excess excavated soil material will only be exported off-site where it is not possible to re-use it within the development site or to backfill temporary excavations. Given the limited scale of most demolition projects, inert construction and demolition waste is generally transferred off-site for recovery at permitted or licensed facilities.

Where excavated soil is inert, it can be re-used at off-site locations for practical and beneficial purposes without the need for treatment, processing or other form of recycling. It is therefore evident that where excess inert soil is generated by development or utilities related works and requires to be exported off site, the highest tier activity on the waste hierarchy to which it may be assigned is a waste recovery activity. The proposed backfilling of the site at Grannagh using inert waste soils and its long-term restoration back to agricultural use will achieve a desirable outcome which would not otherwise be possible or would require extensive use of natural soil resources.

Construction and Demolition Waste

Recycling is defined in the Waste Framework Directive as *‘any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes’*. It can generally be taken as a given that demolition of existing structures is only undertaken as necessary to facilitate construction and development projects.

At the Grannagh facility, construction and demolition waste is crushed and screened in order to produce a secondary aggregate which can be recycled, stored and re-sold as a certifiable granular fill product for re-use by the construction industry. In general, recycling of inert construction and demolition waste in this way is the highest tier on the waste hierarchy to which this waste stream can be assigned. **The Grannagh Facility is a vital part of Waste infrastructure to help Ireland meet the targets set for 2020 for C&D Waste under the EU Waste Framework Directive (2008/98/EC).**

1.4 Environmental Impact Assessment Legislation

This Environmental Impact Statement has been prepared in accordance with the following legislation:

- The European Community Directive (85/337/EEC) on Environmental Impact Assessment as amended by Directive 97/11/EC.
- The European Communities (Environmental Impact Assessment) Regulations, 1989 to 1999 as implemented in Ireland. These include European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I. No. 349 of 1989), the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1994 (S.I. No. 84 of 1994), the European Communities (Environmental Impact Assessment) (Amendment)



Regulations, 1996 (S.I. No. 101 of 1996), the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1998 (S.I. No. 351 of 1998), the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1999 (S.I. No. 93 of 1999). These regulations shall be construed as one and may be collectively cited as the European Communities (Environmental Impact Assessment) Regulations 1989 to 1999.

In accordance with Section 40 (2A)(C) of the Waste Management Acts (1996-2013), the EPA has addressed the information submitted for a Waste Licence Application W0260-01 by CHI Environmental Ltd. and considers that the waste licence application must be made subject to an Environmental Impact Assessment (EIA). Therefore in accordance with Section 42 (II)(b) of the Waste Management Acts (1996-2013), CHI Environmental Ltd. hereby submits an Environmental Impact Statement (EIS).

1.5 Structure and Content of the Environmental Impact Statement

An Environmental Impact Statement (EIS) *"means a statement of the effects, if any, which proposed development, if carried out, would have on the environment"*.

This Environmental Impact Statement is presented in the "Grouped Format Structure" as set down in the Environmental Protection Agency (EPA) publication: **Guidelines on the information to be contained in Environmental Impact Statements** (2002).

Due regard has been given in the preparation of this EIS to the requirements of Article 94 contained in Schedule 6 of the Planning and Development Regulations, 2001 (S.I. 600 of 2001) – *"Information to be Contained in an EIS"*.

This EIS is sub-divided into four distinct sections, each with a number of sub-sections. As an overview they comprise of:

- **Section 1 - Introduction**

Background to the application site and operator with a preamble and introduction to the EIS. This section also includes pre-application consultations and legal requirements followed.

- **Section 2 – Description Of The Proposed Development**

A detailed description of the proposed development, including information on the site, design and size of the proposed development. This also includes operational considerations and final restoration schemes. This section also identifies the data required to assess the main effects which the development is likely to have on the environment.



▪ **Section 3 – The Existing Environment, Environmental Impacts and Mitigation Measures**

Detailed information on aspects of the existing environment, identifying potential impacts on the environment by the proposed development, and recommends mitigation measures to reduce or eliminate these impacts. They are grouped under the following sub-sections:

- Scoping Report
- Flora and Fauna
- Water
- Climate, Air Quality and Dust
- Noise
- Hydrogeology – Geology, Groundwater and Soils
- Cultural Heritage
- Human Beings and Material Assets
- Landscape and Visual Assessment
- Interaction of the Foregoing

▪ **Section 4 – Non-Technical Summary**

A summary in non-technical language of the information contained within the EIS.

1.6 The Applicant

CHI Environmental Ltd is a local County Kilkenny family owned/operated company, which provides employment to ca. 8 no. people in the Kilmacow area. The company principal activity is the recovery of a disused rock quarry on lands owned by Bob Murphy one of the company Directors. This authorised activity has been ongoing since 2004.

CHI Environmental Ltd are a long-term member of the Soil Recovery Association (SRA) which is a National Organisation affiliated to the Construction Industry Federation (CIF) which represents Members involved in the excavation, transport and recovery of soil and stones at authorised permitted and licensed soil and stone recovery facilities.

The SRA has been instrumental in preparing the new EPA Waste Licence Form and Guidance Notes for Waste Soils Recovery Facilities in conjunction with the EPA. In this regard, the SRA had had extensive discussions with the EPA concerning the implementation of the new Regulations including meetings on 12/6/2008 and more recently on 29/1/2009.

1.7 Existing Waste Authorisation

CHI Environmental Ltd. commenced recovery and recycling operations at The Quarry at Grannagh in April 2004, when they applied for and were granted a Waste Permit WMP 22/2003 from Kilkenny County Council. The existing permitted site was granted another Waste Permit (No. WMP 23/2007) by Kilkenny County Council in November 2007 (see **Figure 1.7.1**) In December 2006 full planning permission was granted by Kilkenny County Council for the site recovery activities.



Figure 1.7.1: Copy of Existing Waste Permit WMP023/2007 in Force

Kilkenny County Council
Comhairle Chontae Chill Chainnigh



**WASTE PERMIT UNDER WASTE MANAGEMENT (PERMIT)
REGULATIONS 1998 (S.I. No. 165 of 1998)**

Permit Holder: - Crystalhill Inns Limited
Site Location: - Granny,
Kilmacow,
Co. Kilkenny

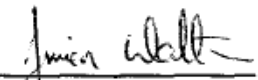
Permit Reference: - WMP023/2007

Kilkenny County Council in the exercise of the powers conferred on it by Article 5 of the Waste Management (Permit) Regulations 1998 hereby grants a permit for the recovery of waste (other than hazardous) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time) to : -

Crystalhill Inns Limited
Dunbrinn
Kilmacow
Co. Kilkenny

in accordance with the plans and particulars furnished with the application WMP 023/2007 received on the 1st June 2007 and 1st October 2007 & 12th October 2007, subject to 11 no. conditions per the attached schedule of conditions.

Dated this 26th day of Nov., 2007


Delegated Officer

Order No. 603



The two Waste Permits granted to date on site (as far back as April 2004), were granted under the Waste Management (Permit) Regulations, 1998 by Kilkenny County Council and authorised CHI Environmental Ltd. to carry out the following waste recovery activities under the Fourth Schedule of the Waste Management Act 1996 (as amended):

1.4 Activities licensed in accordance with the 4th Schedule of the Waste Management Acts 1996 to 2003:

- 2. Recycling or reclamation of organic substances which are not used as solvents.
- 4. Recycling or reclamation of other inorganic materials.
- 10. Spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system, including composting and other biological transformation process
- 12. Exchange of waste for submission to 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.

Existing and proposed inert waste recovery activities (including for the purposes of Improvement or Development of Land) which may have previously operated under a Waste Permit under the Waste Management (Permit) Regulations, 1998 became subject to the Waste Management (Facility Permit and Registration) Regulations 2007 (S.I 821 of 2007) as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations 2008 (S.I. No. 86 of 2008) as from 1st June 2008.

These new Regulations set out new thresholds for inert waste recovery facilities and in particular for operating under Waste Facility Permits. This is set out under Class 5 and Class 6 of Part 1 of the Third Schedule of the Waste Management (Facility Permit and Registration) Regulations 2007 (S.I 821 of 2007) as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations 2008 (S.I. No. 86 of 2008). These regulations set out time scales and requirements for inert waste recovery facilities that were above the new thresholds to apply to the EPA for a Waste Licence.

The new thresholds for Waste Facility Permits were as follows: Class 5: *Recovery of excavation or dredge spoil, comprising natural materials of clay, silt, sand, gravel or stone and which comes within the meaning of inert waste, through deposition for the purposes of the improvement or development of land, where the total quantity of waste recovered at the facility is less than 100,000 tonnes.*

Class 6: *Recovery of inert waste (other than excavations or dredgings comprising natural materials of clay, silt, sand, gravel or stone) through deposition for the purposes of the improvement or development of land, where the total quantity of waste recovered at the facility is less than 50,000 tonnes.*

The new Regulations set out a period of 180 working days from the 1st June 2008 for all existing soil and stone recovery facilities whose threshold exceeds 100,000 tonnes to either cease operations by 13th February 2009 or else have applied to the EPA for a Waste Licence prior to the 13th February 2009. The EPA wrote out to many existing facilities on 31/10/2008 asking operators to confirm which of three following options they would be adopting:



1. Apply to the EPA for a licence prior to the 13th February 2009 or before the expiration of your current permit (whichever is sooner).
2. Reduce your capacity below 100,000 tonnes threshold and continue to operate under a permit issued by the Local Authority.
3. Cease the activity by 13th February 2009.

CHI Environmental Ltd. applied for a Waste Licence (Ref: WO260-01) to the EPA on 13/2/2009 and in accordance with the relevant legislation, they continue to operate under their Waste Permit (No. WMP 23/2007) until this licence is decided upon by the Agency. This is explained by the following legislation and is also confirmed in **Figure 1.7.2: Correspondence from EPA with regards to status of Grannagh Facility.**

The Waste Management (Facility Permit and Registration) Regulations 2007 (S.I 821 of 2007) as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations 2008 (S.I. No. 86 of 2008) state in Article 3 (2) and (4) that:

3. (2) The provisions of the Regulations revoked shall, notwithstanding sub-article (1), continue to apply and have effect in relation to any application that is made for a waste permit or a certificate of registration, or any waste permit or certificate of registration which has been granted, before the coming into operation of these Regulations.

(4) A waste permit granted under the Regulations revoked in respect of an activity which does not fall within part I of the third schedule and which requires a waste licence in accordance with the Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004), as may be amended from time to time, shall remain valid if an application for a waste licence is made to the Agency within 180 working days of the coming into operation of these Regulations, until such time as a decision is taken to grant or to refuse a waste licence under article 34 of the Waste Management (Licensing) Regulations 2004, as may be amended from time to time, at which point the waste facility permit will lapse.

The above legislation further confirms that the existing Waste Permitted Facility at Grannagh operating under Waste Permit WMP 23/2007 will continue to be subject to the Waste Management (Permit) Regulations, 1998 (until such time as the Waste Licence is granted) as this Permit was granted under the 1998 Regulations, prior to the coming into effect of the newer Waste Facility Permit Regulations of 2007/2008.



Figure 1.7.2: Correspondence from EPA with Regards to Status of Grannagh Facility



Headquarters, PO Box 3000
Johnstown Castle Estate
County Wexford, Ireland
Ceanntechní, Bosa Foist 3000
Easáil Chaisleán Bhaile Sheáin
Contae Loch Garman, Éire
T: +353 53 916 0600
F: +353 53 916 0699
E: info@epa.ie
W: www.epa.ie
LoCall 1890 33 55 99

Mr. Patrick Murphy
CHI Environmental Ltd.
Dunbrinn
Grannagh
Kilmacow
Via Waterford

22 June 2011

Re. Waste Licence Application Register Number W0260-01

Dear Mr. Murphy,

Waste licence application register number W0260-01 was submitted to the Agency on 13/02/2009 and as such Article 34 of the Waste Management (Facility Permit and Registration) Regulations 2007, as amended, applies. The waste facility permit in force at the time the waste licence was submitted shall remain valid until such time as a decision is taken to grant or to refuse a waste licence under article 34 of the Waste Management (Licensing) Regulations 2004 at which point the waste facility permit will lapse.

Yours sincerely

Caroline Connell
Inspector
Environmental Licensing Programme
Office of Climate, Licensing and Resource Use



1.8 Site Selection and Alternatives

The existing inert materials recovery site at Grannagh has been up and running since it was granted a Waste Permit back in April 2004. During the past ca. 10 years of operation under a Waste Permit, the facility has never been the subject of any complaints or enforcement issues as proven by Local Authority (Kilkenny County Council) records.

Furthermore the compliance monitoring is all up to date and is all compliant with the Permit requirements and therefore indicates that the existing inert soil and stone recovery facility and inert materials recycling and transfer facility at The Quarry, Grannagh has not had any detrimental impact on the environment.

Therefore, as an established authorised site which has undergone a full assessment by the Local Authority, it was not necessary to carry out a site selection study as would be required for a “green-field” site.

Furthermore, a soil recovery facility for the consequential benefit to agriculture can only be sited where the need arises as in this case with the disused rock quarry at Grannagh.

It is not appropriate therefore to identify and appraise the merits of alternative candidate sites for the proposed waste recovery activities.

The use of inert soil and stone in the recovery activity is the most suitable material for the as it prevents the use of primary aggregates such as quarried rock and therefore protects valuable rock reserves and meets the targets set in The EU Waste Directive 2008/98/EC.

At all stages of the site design and site operation, alternative techniques, equipment and machinery have been considered and employed where appropriate to ensure that the continued operation of the existing inert soil and stone recovery facility and inert C&D materials recycling facility at The Quarry, Grannagh does not have any significant negative impacts upon the environment.

1.9 Data Necessary to Identify and Assess Environmental Effects of Development

The data necessary to identify and assess the environmental effects of the development are:

- (i) The existing environment, as described in Section 3.
- (ii) The characteristics of the development as described in Section 2, including its size and scale, processes involved and the emissions from the existing licensed soil recovery facility.
- (iii) The potential environmental effects of the project are assessed and proposed mitigation measures are presented in Section 3.

Information on all aspects of the environment was obtained from published information and from specially commissioned field surveys.



1.10 Difficulties Compiling Specified Information

Baseline information for the existing site and its environment was readily compiled by the EIS contributors and no such difficulties were found.

1.11 Forecasting Methods Used to Assess the Effects on the Environment

The methods employed to forecast the effects on the various aspects of the environment are standard techniques used in the professional disciplines. The general procedure employed was to describe the receiving environment in a dynamic fashion, to add to that a projection of the loading placed on all aspects of the environment by the development in its mitigated form and thereby arrive at the net likely significant effect of the development on the environment.

1.12 Contributors to the EIS

The preparation and co-ordination of this Environmental Impact Statement on behalf of CHI Environmental Ltd. has been undertaken by Mr. Freddie P.R. Symmons B.Env.Sc. (HONS) MCIEEM – Senior Environmental Consultant of Kingfisher Environmental Consultants and Full Member of the Chartered Institute of Ecology and Environmental Management.

Kingfisher Environmental Consultants Kingfisher Environmental Consultants have prepared and lodged in excess of 70 waste permit applications in Ireland for land reclamation activities, and inert material recycling facilities. This particular experience dates back to 1998. In addition we have vast experience in Environmental Impact Assessment and preparation of EIS's and planning applications for land reclamation activities and inert materials recovery facilities.

Kingfisher Environmental Consultants formed and established the Soil Recovery Association (SRA) in Ireland in 2005 and are lead consultants to this industry led organisation. Extensive representations were made in 2005 and 2008 to the Department of Environment concerning the now enacted Waste Management (Facility Permit and Registration) Regulations 2007 (S.I 821 of 2007) as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations 2008 (S.I 821 of 2007).

Furthermore Kingfisher Environmental Consultants assisted (on behalf of the Soil Recovery Association) with the drafting of the New EPA Waste Licence form for soil recovery facilities and also assisted in the preparation of the Guidance Note for Soil Recovery Activities.

1.13 Consultations

In preparing this Environmental Impact Statement, a number of organisations provided services/information which has been used in the compilation of this EIS. These included:

- Kilkenny County Council
- Environmental Protection Agency
- Inland Fisheries Ireland
- Department of the Environment
- Geological Survey Of Ireland



- Meteorological Service, Dublin
- National Parks and Wildlife Service
- OPW - Archaeology Section
- Ordnance Survey Ireland
- Roger Goodwillie & Associates – Ecologist and MCIEEM.

Other consultations and informal discussion held by contributors in undertaking their environmental impact assessments are detailed in the specialist environmental sections of the EIS, together with details of relevant archives and documentation held by state agencies and organisations

1.14 Appropriate Assessment Screening

1.14.1 Background to Appropriate Assessment

As part of the application for a Waste Licence (W0260-01) that was made to the EPA in February 2009 the EPA requested further information on 28/2/2014 under Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations.

CHI Environmental Ltd. were requested by the Environmental Protection Agency (EPA) to Screen for Appropriate Assessment for the existing Waste Recovery Facility at The Quarry at Grannagh.

In June 2014, Roger Goodwillie & Associates on behalf of CHI Environmental Ltd., carried out an Appropriate Assessment Screening Statement which was submitted to the Agency in support of the Waste Licence Application. This is referred to in the Flora and Fauna Section.

With the introduction of the Birds Directive in 1979 and the Habitats Directive in 1992 came the obligation to establish the Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the EU. In Ireland, the Natura 2000 network of European sites comprises Special Areas of Conservation (SAC's) and Special Protection Areas (SPA's).

Appropriate Assessment (AA) involves a case-by-case examination of the implications of a development for the Natura 2000 site and its conservation objectives. This may be presented in the form of a Natura Impact Statement. In general terms, implicit in Article 6(3) of the Habitats Directive is an obligation to put concern for potential effects on Natura 2000 sites at the forefront of every decision made in relation to plans and projects at all stages.

Screening for Appropriate Assessment is the first stage and critical test of Appropriate Assessment and the question is asked whether the development is considered to have a significant impact on the designated Natura 2000 site. The purpose of screening is to determine, on the basis of a preliminary assessment and objective criteria, whether:

- i) a plan or project is directly connected to or necessary for the management of the site, and ii) whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a Natura 2000 site in view of the site's conservation objectives.



As most projects will not be related to point (i) above, this will virtually always be irrelevant but with regards to point (ii) if the answer is no then the process is complete and full appropriate assessment is not required. Screening therefore is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3) of the Habitats Directive.

1.14.2 Findings of Appropriate Assessment Screening

CHI Environmental Ltd., Dunbrinn, Grannagh, Kilmacow, County Kilkenny operate an existing inert soil and stone recovery facility and inert C&D materials recycling facility at The Quarry, Grannagh, Kilmacow, Co. Kilkenny. To that end, the Appropriate Assessment Screening Report considers whether any activity or proposed increase in activity on the lands, either individually or in combination with other plans or projects is likely to have a significant effect on Natura 2000 sites, in view of best scientific knowledge and the conservation objectives of the site(s).

The Appropriate Assessment Screening Report finds that:

“The site does not contain any of the habitats or species that are the special interests of the cSAC and therefore it cannot act as a reservoir to replenish the Natura 2000 site in the event of loss. The only possible impact would be through site drainage reaching the estuary in significant quantities and carrying some kind of detrimental matter. The organisms that occur in the nearest section of river are sea lamprey, river lamprey, the Atlantic salmon, Twaité shad and otter. The fish migrate through the estuary to breed upstream while the otter is resident, feeding on many species of fish and on frogs.”

The Appropriate Assessment Screening Report findings are discussed further in Section 3.2 of the EIS and it concludes that:

“The protective measures built into the design and operation of the facility will prevent this project having any significant effect on the Natura 2000 site – the Lower River Suir (Site Code 2137) – or its conservation objectives. This applies both to the on-going operation phase and final restoration. Since this is the case there is no likelihood of ‘in combination’ effects on the Natura site Network”.

Therefore the site can be screened out of further stages of Appropriate Assessment.