

# Attachment H

## Materials Handling

<u>Sub-Section</u>	<u>Contents</u>	
H.1	Waste Types & Quantities – Existing & Proposed	2
H.2	Waste Acceptance Procedures	6
H.3	Waste Handling	8
H.3.1	Recovery of Soils	8
H.3.2	Recovery of Construction Materials	9
H.4	Waste Arisings	9
H.5	Waste Recycling and Recovery	10
H.5.1	Waste Management Policy & Legislation	13

### Tables

- H.1.1 Volume of Material to be Imported for Restoration Works at Kilmeage Pit
- H.4(ii) WASTE - Other Waste Recovery/Disposal
- H.2.1 List of wastes acceptable at landfills for inert waste without testing

## H.1 Waste Types & Quantities – Existing & Proposed

The nature of the development is the importation of inert soils, stone, and recovery of inert construction and demolition waste for the continued phased restoration of a sand and gravel pit to a contoured landform that will be in keeping with the surrounding landscape.

It is proposed that up to circa 345,000 tonnes per annum of inert materials, subject to market demand, will be accepted to site. The site has the benefit of existing planning permission (P.A. Reg, Ref. 03/1773 & 12/373) for the above development. This figure is based on the maximum limit of 50 truckloads per day permitted (Condition No. 38 P.A.Reg. ref. 03/1773. This is the maximum amount of material that can be imported to site.

Whilst it is difficult in the current economic climate to forecast demand due to a number of variables including availability of inert materials generated by construction activity; scale, duration and location of construction projects; it is considered that the average will be closer to 250,000 tonnes per annum.

The lands have undergone partial restoration under Waste Management Permit No. 126/2003. It is estimated that c. 440,000 tonnes of inert soil and stone and construction and demolition waste was imported to site under the terms of the previous waste permit.

The backfilling/restoration at Kilmeage is to be carried out in accordance with the agreed landscaping plan submitted to Kildare Co. Council. In accordance with Condition No. 33 of P.A. Reg. Ref. 03/1773, *“as soon as is practicable following completion of the in-filling activities, the site shall be seeded with grass. Prior to seeding, topsoil shall be spread evenly over the site to a minimum depth, after firming, of 150 -200 mm. The topsoil shall be good quality, and shall comply with BS 3882: 1991. The topsoil shall not be spread in wet conditions. The topsoil shall be adequately prepared for seeding by raking or harrowing and by rolling. Seed shall be spread at a minimum rate of 30 grams per square metre”*.

The phased scheme for final restoration of the area is shown by Figures D.1.1 to D.1.4.

The volume of material required to be imported to the site to complete the proposed restoration scheme has been calculated (using the Digital Terrain Modelling Software Package LSS) and is shown below.

**Table H.1.1 Volume of Material to be Imported for Restoration Works at Kilmeage Pit**

Phase	Void Space		Life Span		Depth of Fill		Comments
			345,000 tpa	250,000 tpa	Average <sup>4</sup>	Maximum <sup>5</sup>	
	m <sup>3</sup>	tonnes <sup>1</sup>	Years <sup>2</sup>	Years <sup>3</sup>	m	m	
<b>1A</b>	<b>11,907</b>	<b>23,814</b>	<b>0.1</b>	<b>0.1</b>	<b>5.2</b>	<b>15</b>	Remedial works required to support the eastern boundary by banking of engineering fill material against the quarry face
<b>1B</b>	<b>27,557</b>	<b>55,114</b>	<b>0.2</b>	<b>0.2</b>	<b>4.9</b>	<b>18</b>	As above including infill of old access road to pit floor. A new access is to be constructed towards the centre of the site.
<b>1C</b>	<b>50,609</b>	<b>101,218</b>	<b>0.3</b>	<b>0.4</b>	<b>8.2</b>	<b>17</b>	As above.
<b>1D</b>	<b>34,784</b>	<b>69,568</b>	<b>0.2</b>	<b>0.3</b>	<b>4.0</b>	<b>17</b>	Infilling of area between new main internal access road and western boundary. Eastern boundary to be backfilled/graded to c. 1:2 slope.
<b>2A</b>	<b>117,342</b>	<b>234,684</b>	<b>0.7</b>	<b>0.9</b>	<b>8.5</b>	<b>17</b>	Backfilling of southeastern corner to final restoration profile.
<b>2B</b>	<b>124,916</b>	<b>249,832</b>	<b>0.7</b>	<b>1.0</b>	<b>9.4</b>	<b>31</b>	Backfilling of northern corner to final restoration profile.
<b>3A</b>	<b>182,148</b>	<b>364,296</b>	<b>1.1</b>	<b>1.5</b>	<b>8.4</b>	<b>20</b>	Backfilling of Bottom of pit floor to 114 mAOD.
<b>3B</b>	<b>172,064</b>	<b>344,129</b>	<b>1</b>	<b>1.4</b>	<b>6.4</b>	<b>24</b>	Backfilling to 122 mAOD.
<b>4</b>	<b>262,409</b>	<b>524,817</b>	<b>1.5</b>	<b>2.1</b>	<b>5.6</b>	<b>32</b>	Final Restoration
<b>Totals</b>	<b>983,736</b>	<b>1,967,472</b>	<b>5.7</b>	<b>7.9</b>	<b>6.7</b>	<b>32</b>	

**Notes:** 1. Assumes conversion factor of 2 tonnes/m<sup>3</sup> for inert soils and stones (allowing for compaction and settlement). This is based on JSPE Ltd's experience and other operators in the sector.

2 Assumes 345,000 tonnes recovered per annum (subject to market conditions). This figure is based on the maximum limit of 50 truck loads per day permitted (Condition No. 38 P.A.Reg. ref. 03/1773.

3, it is considered that the average fill rate will be closer to 250,000 tonnes per annum.

4. Average fill depth for Phase of development.

5. Maximum overall fill depth for phase since commencement of operations.

It is estimated that c. 20,000 tonnes per annum of construction and demolition waste will be imported to site. Due to relatively small volumes it is likely that a mobile crusher/screening unit will be mobilised to site on a campaign basis and/or 3 monthly intervals. Recycled material (subject to reaching end of waste status (Article 28)) will be used for internal haul roads and/or dispatched offsite.

Further details with respect to the type of materials including European Waste Catalogue code references are provided in the following table Table H.4(ii). No other waste types shall be accepted or recovered at this facility.

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

**TABLE H.4(ii) WASTE - Other Waste Recovery/Disposal**

Waste material	EWC Code	Main source <sup>1</sup>	Quantity		On-site recovery/disposal <sup>2</sup> (Method & Location)	Off-site Recovery, reuse or recycling (Method, Location & Undertaker)	Off-site Disposal (Method, Location & Undertaker)
			Tonnes / month	m <sup>3</sup> / month			
Concrete	17 01 01	Site Clearance	1,670	1,113	Will be used to construct haul roads and hardstanding areas on site and/or processed for secondary aggregates  As Above  As Above  As Above  As Above  As Above	Not Applicable	Not Applicable
Bricks	17 01 02	Site Clearance				Not Applicable	Not Applicable
Tiles & Ceramics	17 01 03	Site Clearance				Not Applicable	Not Applicable
Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	17 01 07	Site Clearance				Not Applicable	Not Applicable
Track ballast other than those mentioned in 17 05 07	17 05 08	Site Clearance				Not Applicable	Not Applicable
Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	17 09 04	Site Clearance				Not Applicable	Not Applicable
Soil and stones other than those mentioned in 17 05 03	17 05 04 <sup>3</sup>	Site Clearance	20,833-27,083	10,417-13,542		Used to restore sand & gravel pit workings	Not Applicable
Dredging spoil other than those mentioned in 17 05 05	17 05 06 <sup>3</sup>	Site Clearance			Used to restore sand & gravel pit workings	Not Applicable	Not Applicable

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

2 The method of disposal or recovery should be clearly described and referenced to Attachment H.1

3 Assumes conversion factor of 2 tonnes/m<sup>3</sup> for inert soils and stones (allowing for compaction and settlement). This is based on JSPE Ltd's experience and other operators in the sector.

4 Assumes conversion factor of 1.5 tonnes/m<sup>3</sup> for inert waste (concrete, bricks, tiles, ceramics, etc). This is based on volume to weight conversion factors taken from the Waste Management (Landfill Levy) Regulations, 2015, S.I. No. 189 of 2015.

## H.2 Waste Acceptance Procedures

Materials to be recovered will only be accepted from approved contractors who are aware of the need for and who undertake strict segregation and sorting of waste prior to transporting it to the application site.

It is the intention of the applicant to require the waste producer/contractor to complete a basic characterisation of the waste prior to the removal from the site at which the waste is produced.

The applicant will endeavour to visit the construction sites to ensure materials are being properly sorted and segregated at source.

Typically loads of up to 9 cu.m will be imported to site. Only hauliers with the appropriate Waste Collection Permits will be accepted.

The documentation of waste arriving at the facility shall be checked at the point of entry to the facility. All truck loads entering the site will be given a preliminary inspection on entering the site. If the material is not considered acceptable the haulier is refused entry and directed to return to the producer and/or an appropriate Waste Management Facility.

Each truckload will be weighed on the weighbridge, characterised by material type and assigned an EWC code. These details along with the date, time, producer and haulier, vehicle number, site of origin will be recorded electronically and available to view on request.

Recovery, in accordance with Directive 75/442/EC, of inert or non-hazardous waste which is suitable, through their use in the redevelopment/restoration and filling-in work, or for construction purposes is not considered to constitute a landfill activity.

In accordance with Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to article 16 of and Annex II to Directive 1999/31/EC; it is proposed to accept the following wastes which are acceptable at landfills without testing. The waste must be a single stream (only one source) of a single waste type. Different wastes contained in the list maybe accepted together, provided they are from the same source.

In case of suspicion of contamination (either from visual inspection or from knowledge of the origin of the waste) testing should be applied or the waste refused.

**Table H.2.1 List of wastes acceptable at landfills for inert waste without testing**

EWC Code	Description	Restrictions
1701 01	Concrete	Selected C & D waste only (*)
1701 02	Bricks	Selected C & D waste only (*)
1701 03	Tiles & Ceramics	Selected C & D waste only (*)
1701 07	Mixtures of concrete, bricks, tiles and ceramics	Selected C & D waste only (*)
1705 04	Soil and stones	Excluding topsoil, peat; excluding soil and stones from contaminated sites
2002 02	Soil and stones	Only from garden and parks waste; Excluding top soil, peat

(\*) *Selected construction and demolition waste (C & D waste): with low contents of other types of materials (like metals, plastic, soil, organics, wood, rubber, etc). The origin of the waste must be known.*

— *No C & D waste from constructions, polluted with inorganic or organic dangerous substances, e.g. because of production processes in the construction, soil pollution, storage and usage of pesticides or other dangerous substances, etc., unless it is made clear that the demolished construction was not significantly polluted.*

— *No C & D waste from constructions, treated, covered or painted with materials, containing dangerous substances in significant amounts.*

Topsoil shall also be imported to site for final capping only. No topsoil shall be used for backfilling at the facility. The topsoil may be kept in temporary storage pending final placement. Only inert uncontaminated topsoil shall be imported to site for restoration purposes.

Any Contractor who persistently carries unacceptable waste to the application site will be denied further use of the facility.

A designated internal haul road will be maintained to direct site traffic to the tipping area.

Secondary inspection will be carried out after each load is tipped at the restoration infill area within the site. Should a load of material indicate contamination of non-inert material on inspection, the material will be reloaded and the driver instructed to remove the load offsite to an approved facility.

Construction and Demolition waste to be recovered as secondary aggregates will be tipped in a designated bay for inspection and characterisation. Accepted material will be directed to the appropriate stockpile for subsequent recovery/processing through the facility.

## Quarantine

Occasionally a load will contain minor contaminants (e.g. plastics, rebar, wood and paper). These items are removed on inspection by a site operative and stored in a designated quarantine area pending removal offsite by a licensed waste disposal contractor to an appropriate disposal facility. All waste stored in the waste quarantine area shall be stored in a skip.

### H.3 Waste Handling

Plant on site will comprise a bulldozer, excavator, tractor and bowser, road sweeper attachment. A loading shovel and crushing and screening plant will be utilised by the proposed C&D Recycling Facility.

There is a weighbridge on site. Trucks entering the site are typically 4 axle 9 cu.m capacity rigid bodied tippers. Details with respect to truck loads and volume of inert materials received will be recorded electronically at the site inspection office.

#### H.3.1 Recovery of Soils

Following the second inspection the material will be accepted and placed within the restoration (placement by bulldozer) area or in the case of topsoil placed in temporary storage awaiting final placement.

The lands are to be restored to agricultural use by importation and recovery of inert materials in accordance with a phased restoration scheme. Designated internal haul roads will be used to direct site traffic to the current tipping area. A bulldozer will be used to appropriately grade and compact the material to the desired profile as shown by the detailed plans and sections (Refer to Figures D.1.1 to D.1.6). Typically the soil will be placed in 2-3 metre lifts with fill slopes of a safe angle of repose of 1:2.

It is proposed to reclaim the lands to a condition / gradient suitable for agricultural/forestry. Good quality imported soil will be conserved wherever possible to provide the subsoil/top-soil capping. These topsoil's/subsoil's will be handled under dry conditions to minimise compaction. For the purpose of restoration to agricultural/forestry the restored soil profile (capping) shall comprise 300mm topsoil over 1200-1350mm of subsoil.

Progressive restoration involving grass seeding of restored areas shall be carried out on a staged basis to reduce the effects of soil erosion, windblown dust, to aid ground stabilisation and as an effective means of weed control. On completion of each phase of development final restoration including grading, seeding and landscaping will be carried out. Final restoration is dependent on the availability of good topsoil/subsoil



and subject to suitable weather conditions. In order to allow for continuity of operations it is necessary to have a certain overlap between phases. The final contours and topography for the site is shown by the Final Restoration Plan Figure D.1.4 and Cross Sections Figures D.1.5 & D.1.6.

In order to access the pit floor the haul roads shall be constructed using suitable imported material (i.e. brick, block, concrete and stone). The proper construction of the haul road will help minimise the amount of mud and dust generated by lorries entering and leaving the site.

### **H.3.2 Recovery of Construction Materials**

Clean construction and demolition waste will either be used on haul roads or temporarily placed in storage awaiting recovery.

Recovery and re-cycling activities at the application site will involve tipping of previously stockpiled 'unprocessed' material into a mobile crushing & processing plant using a front-end loader (Refer to Figures D.1.1 to D.1.3).

The processing will be undertaken periodically as materials are required using a semi mobile crushing and screening plant on site. Material produced by the plant will then be transported by front-end loader to 'processed' stockpiles. Recovered material will be used for internal haul roads and/or dispatched off-site.

No sorting of materials other than separation of rebar from concrete will be undertaken on site as all material will be sorted and segregated at source before being brought to the application site. Rebar (reinforced steel) separated from concrete will be stored in the designated quarantine area awaiting removal off-site by a licensed scrap merchant.

## **H.4 Waste Arisings**

The applicant will endeavour to visit the construction sites to ensure materials are being properly sorted and segregated at source.

The facility generates small volumes of office and canteen wastes which are stored in wheelie bins awaiting collection. A licensed waste collection contractor has been appointed to remove any canteen waste requiring recovery/disposal to a licensed waste management facility.

Occasionally a load will contain minor contaminants (e.g. plastics, metal, wood and paper). These items are removed on inspection by a site operative and stored in a designated quarantine area pending removal offsite by a licensed waste disposal contractor to an appropriate recovery/disposal facility.

No waste oil products are stored on site. Waste oils will be disposed of by a licensed waste contractor and removed off site (Refer also to EIS Section 3.7.4).

All oil barrels and lubricants will be stored on spill pallets/ spill trays. Spill kits will be maintained on site and the Company will put in place an emergency response procedure for hydrocarbon spills and appropriate training of site staff in its implementation.

Details with respect to the appointed waste recovery/disposal contractor including waste collection permit number and destination (waste licence/permit register number, licensing/permitting authority) will be maintained.

## **H.5 Waste Recycling and Recovery**

Regulation 31(1) and (2) of the European Communities (Waste Directive) Regulations 2011 relate to implementation of measures by the Government to promote the re-use and the recycling of waste materials. Regulation 31(2) requires that the state takes the necessary measure to achieve the following targets.

- (a) by 2020, the preparing for re-use and the recycling of waste materials such as, at least, paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be increased to a minimum of overall 50% by weight;
- (b) 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

Amendment of Section 29 of Act of 1996 under Part 2 (14) of the European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) states that: -

### **29 Measures related to recovery of waste**

2A) (a) of the regulations states that *“It shall be the duty of waste producers and holders to ensure that waste undergoes recovery operations in accordance with sections 21A and 32(1)”*. i.e.

#### **21 A Waste hierarchy.**

*(1) The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:*

*(a) prevention;*

- (b) preparing for re-use;*
- (c) recycling;*
- (d) other recovery (including energy recovery); and*
- (e) disposal.*

### **32 General duty of a holder of waste**

*(1) A person shall not—*

- (a) cause or facilitate the abandonment, dumping or unauthorised management or treatment of waste, or*
- (b) hold, transport, recover or dispose of waste, or treat waste, in a manner that causes or is likely to cause environmental pollution.*

Refer to Attachment H.5.1 which provides a summary of the relevant Waste Management Policy and Legislation and details how the proposed development is consistent with the above regulations so as to promote the re-use and the recycling of waste materials in order to achieve the relevant targets.

The proposed facility will involve the recovery of inert C&D waste, mainly soil and stone, for the beneficial use of backfilling and restoring disturbed and degraded land back to agricultural use. Clean, uncontaminated soils are suitable for quarry restoration projects, whereas clean brick, block and concrete rubble are suitable for recovery as secondary aggregates for use in the construction of hard standing areas, access roadways, drainage, etc.

The recovery of C&D waste is essential to divert reusable inert waste from disposal in landfill, as required under the Waste Framework Directive 2008 (2008/98/EC), and the European Communities (Waste Directive) Regulations, 2011 (S.I. 126 of 2011). Thus, the facility will result in a reduction of quantities of such waste being sent to landfill sites in the region. Furthermore, the recovery of waste also has the environmental benefit of enabling the lands to be restored to agricultural use in accordance with the restoration scheme proposed.

The Facility at Kilmeage will involve the recovery/reuse of inert “soils and stones” and inert construction and demolition waste and as such the recovery operations are towards the top of the waste hierarchy in that the wastes are prepared for re-use.

Further details of measures with respect to the acceptance and recovery of these materials are included in Attachments H.2 to H.4 above.

Furthermore, as stated in the Waste Licence application the applicant has included measures to ensure segregation at source. i.e.

**Attachment D.1.s – Construction and Demolition waste infrastructure**

*“No sorting of materials other than separation of rebar from concrete will be undertaken on site as all material will be sorted and segregated at source before being brought to the application site”.*

**Attachment D.2.(a) – Unit Operations**

*“Materials to be recovered will only be accepted from approved Contractors who are aware of the need for and who undertake strict segregation and sorting of waste prior to transporting it to the application site;*

*The applicant will endeavour to visit the construction sites to ensure materials are being properly sorted and segregated at source”.*

As stated in Attachment D.1.(a) *“The site entrance gates will be locked outside of normal working hours and public warning notices are posted at appropriate locations along the site boundary. There is also CCTV at the site entrance. These measures are to ensure that there is no unauthorised dumping of unacceptable wastes outside of operating hours likely to give rise to nuisance.*

*A daily site inspection including site boundaries adjoining public roads shall be carried out”.*

Details with respect to the nature, scale, operation, impact, control and abatement, monitoring, closure and aftercare have been provided through preparation of the Waste Management Licence application.

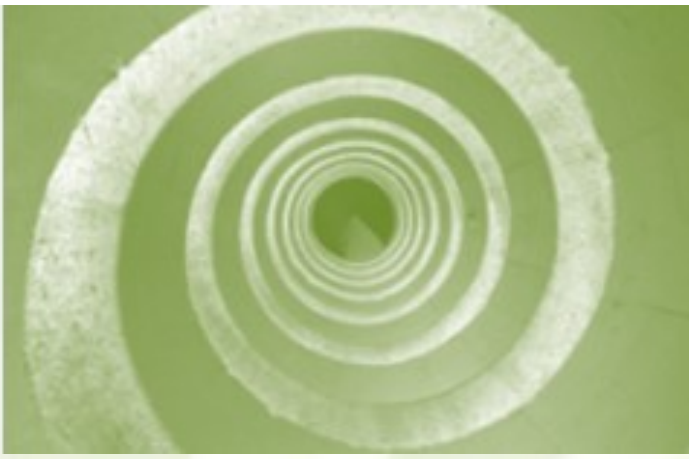
A Closure Plan & Environmental Liability Risk Assessment has also been carried out and is included with this application (Refer to Attachment K.1.2).

As such it is considered that the operators will have in place comprehensive measures to ensure that the waste is handled and recovered in a manner that will not cause environmental pollution.

## H.5.1

## Waste Management Policy & Legislation

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



# JSPE

J Sheils Planning & Environmental Ltd

**N&C Enterprises LTD.**

**Waste Management Policy & Legislation**

**the Pit, Kilmeage,  
Naas, Co. Kildare.**

**June 2016**

**J Sheils Planning & Environmental Ltd**

31 Athlumney Castle, Navan, Co Meath

Phone/Fax: Ireland +353 46 9073997

Mobile: John Sheils +353 87 2730087

Email: [johnsheils@jspe.ie](mailto:johnsheils@jspe.ie)

**Waste Management Policy & Legislation**

## Table of Contents

<b>1</b>	<b>WASTE LEGISLATION</b>	<b>2</b>
<b>1.1</b>	<b>GOVERNMENT POLICY</b>	<b>3</b>
1.1.1	The National Spatial Strategy	3
1.1.2	The National Development Plan 2007-2013	5
1.1.3	National Waste Policy	5
1.1.4	The Eastern and Midland Regional Assembly	7
1.1.5	Regional Planning Guidelines Greater Dublin Area	8
1.1.6	Regional Waste Management Plan	9
1.1.6.1	Construction and Demolition (C&D) waste	10
1.1.6.2	Recovery – Backfilling	12
1.1.6.3	Recycling – Material Reprocessing	13
1.1.6.4	Facility Authorisations by Local Authorities	13
1.1.7	Guidelines	13
1.1.8	County Development Plan	14
<b>1.2</b>	<b>REFERENCES</b>	<b>17</b>

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

## 1 WASTE LEGISLATION

The Waste Framework Directive (WFD) 2008/98/EC, which repealed previous Waste Directives 75/439/EEC, 91/689/EEC and 2006/12/EC, establishes a legal framework for the treatment of waste within the EU, excepting certain waste categories, such as radioactive elements, waste water, animal by-products, etc. The Directive seeks to protect the environment and human health through the prevention of the harmful effects of waste generation, and through waste management. Article 13 requires Member States to take measures to ensure that waste is managed while safeguarding human health and the environment, and in particular:

- without risk to water, air or soil or to plants or animals
- without causing a nuisance through noise or odour
- without adversely affecting the countryside or places of special interest

In order to address the whole waste cycle, Member States are required to implement legislation in accordance with a hierarchy for the treatment of waste, set out in Article 4, which ranges from prevention, reuse, recycle, energy recovery to disposal (i.e., analogous to Landlink's Ladder). The Directive also addresses issues of waste management, permits and registration, and the establishment of national waste management plans.

The management of waste in Irish Law is codified principally in the Waste Management (WM) Acts, 1996 and 2001, and Part 3 of the Protection of the Environment Act, 2003, which may be cited together as the Waste Management Acts, 1996, as amended. The European Communities (Waste Directive) Regulations, 2011 (S.I. 126 of 2011) represents the transposition of the Waste Framework Directive, 2008 into Irish Law, and amends these Acts.

The 2011 Regulations apply the definition of 'waste' established in the 1996 WM Act as "any substance or object belonging to a category of waste specified in the First Schedule or for the time being included in the European Waste Catalogue (EWC) which the holder discards or intends or is required to discard, and anything which is discarded or otherwise dealt with as if it were waste shall be presumed to be waste until the contrary is proved".

The Waste Management Acts, as amended, require that any person, with few exceptions, carrying out the recovery or disposal of waste shall hold a waste license, a waste facility permit or a certificate of registration, depending on the nature and extent of the activity. This requirement for waste disposal and recovery activities to be authorised is provided for in Part V, Section 39 of the Waste Management Acts. Sub-section 39(1) states that all such activities require a waste licence, except those classes of activities for which waste permit regulations have been provided under subsection 39(4). Sub-section 39(5) sets out that the waste permit regulations shall provide specifics on the quantities of waste that may be disposed or recovered under waste permits, and that waste permits or waste certificates, as opposed to waste licences, are obtained from the local authority, for privately operated waste facilities, or the Agency.



The Waste Management (Facility Permit and Registration) Regulations 2007 (S.I. 821 of 2007), as amended (i.e., S.I. 86 of 2008), governs waste facility permits and certificates of registration. These regulations introduced a number of thresholds with respect to Waste Facility permits and Certificates of Registration for recovery of inert soils and stones.

A waste management licence application is required for recovery of inert soils and stone through deposition for the purposes of the improvement or development of land, where the total quantity of waste recovered at the facility is greater than 100,000 tonnes.

The principal activity being applied for at Kilmeage is Class R 5 of the Fourth Schedule of the Waste Management Act 1996, as amended (recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials). Other activities include Class R 13 of the Fourth Schedule (Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced)).

## 1.1 GOVERNMENT POLICY

The unsustainable levels of resource utilisation and waste generation within the EU have made waste management a central issue for policy makers in the EU (EPA 2012). Consequently, the EU passed the Waste Framework Directive in 2008. One of the main objectives of the Directive is to provide a framework to transform Europe into a society with high levels of recycling and resource efficiency. The Waste Framework Directive 2008/98/EC established a legal framework for the treatment of waste within the EU, through the prevention of the harmful effects of waste generation, and through waste management. In order to effect this transformation, Member States are required to implement legislation in accordance with a hierarchy for the treatment of waste.

Whilst EU legislation has been a primary driver of change in Ireland's posture with respect to waste management, the landfill levy introduced in 2002 was another key driver of change. These measures are driving the options for post-consumption management further up the waste hierarchy, away from reliance on disposal in landfill, and towards more sustainable behaviours (EPA 2012b).

Of particular importance is Article 11.2 of the Directive, which states that "Member States shall take the necessary measures designed to achieve that by 2020 a minimum of 70% (by weight) of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 04 in the List of Wastes shall be prepared for re-use, recycled or undergo other material recovery (including backfilling operations using waste to substitute other materials)".

### 1.1.1 THE NATIONAL SPATIAL STRATEGY

The National Spatial Strategy (NSS) was launched by the government in late 2002 and is designed to provide a framework for balanced social, economic and physical development between the regions for the next 20 years (DoELG 2002). The strategy is based on a hierarchy

of settlement; Gateways, Hubs and County Towns along with the need to support the role of smaller towns, villages and diverse rural economies.

The NSS provides a framework to promote and balanced regional development and sustainable growth. It also guides policies, programmes and investment. The strategy emphasizes continued strong growth in the Greater Dublin Area (GDA), but with significant improvement in the regions outside the capital and more particularly in the nine gateway cities and nine hub towns. Kildare has neither a gateway nor hub town and as such will have to compete with higher order cities and towns to secure funding for strategic investment opportunities. Naas, Newbridge and Kilcullen are recognised as the Primary Development Centres, strategically placed, strong and dynamic urban centres where development should be concentrated. Kildare Town, Monasterevin and Athy represent secondary economic growth towns, which are smaller towns that can cater for local growth in residential, employment and service functions.

Kildare occupies a strategic location in the Greater Dublin Area (GDA) and benefits from a wealth of natural resources. As a constituent of the GDA, it is part of the largest market in the country and at the centre of Ireland's primary economic hub. The transport infrastructure in the County provides easy access to Dublin Airport and Port. Meanwhile Kildare benefits from a strategic location along the M7/M8/M9 transport corridor, a major economic corridor, joining five of the six cities in the Republic (i.e., Dublin, Limerick, Cork, Kilkenny and Waterford).

The NSS recognises that quality of life is increasingly important to people and that unbalanced development affects quality of life. The growing trend of long distance commuting, and the dislocation between centres of employment and residential development are economically, socially and environmentally unsustainable. The NSS recognises that the solution lies in balanced regional development, whereby the potential of each area to contribute to the economic, social and environmental wellbeing of the State is developed. Ireland's growing population can be accommodated within existing settlements, by renewing and developing our cities, towns and villages, and ensuring that urban land is used sensitively and efficiently in order to provide attractive, sustainable, compact, public transport friendly forms, whilst avoiding urban sprawl.

The Government recently approved the commencement of the preparation of a new National Planning Framework to act as a new long-term national planning and regional development framework as a successor to the 2002 National Spatial Strategy which was Ireland's first national strategic spatial planning framework.

The new National Planning Framework will be developed to ensure the optimal development of the country as a whole while maximising Ireland's economic recovery and ongoing growth at national, regional and local level, thus further contributing to sustainable national recovery through an inclusive and participative approach with all relevant national, regional and local interests and acting as the strategic context for:

- 1) planning in Ireland at national level, in relation to relevant Government policies and investment concerning national and regional development with particular emphasis on economic development and investment in housing, water services, transport, communications, energy, health and education infrastructure;

- 2) development, by the three new regional assemblies, of their new regional spatial and economic strategies for their areas including the Northern and Western Regional Assembly area; and
- 3) planning authorities and An Bord Pleanála discharging their statutory planning functions.

### 1.1.2 THE NATIONAL DEVELOPMENT PLAN 2007-2013

The National Development Plan 2007-2013 sets out a detailed development strategy for the country supported by a multi-annual investment commitment in the key areas of infrastructural development, education and training, the productive sector and the promotion of social inclusion. The Plan also contains a commitment and accompanying framework for the promotion of more balanced regional development.

The Government committed itself in its Programme for Government to review progress on deficit reduction in order to achieve the objective of reaching the 3% of GDP deficit target by 2015<sup>1</sup>. The Department of Finance carried out a review of Infrastructure Investment Priorities for 2010-2016<sup>2</sup>. The review represented a reappraisal of the Government's Public Capital Programme, designed to re-focus investment plans and ready the Irish economy for a return to growth. Investment in economic infrastructure is a key element in the promotion of competitiveness and the generation of sustainable economic growth and employment. It also contributes to regional development and assists environmental sustainability.

The Government has recently agreed its 6-year capital investment framework, *Building on Recovery: Infrastructure and Capital Investment 2016-2021*<sup>3</sup>

This Capital Plan presents the Government's new €42 billion framework for infrastructure investment in Ireland over the period 2016 to 2021. In total, this State-backed investment package represents over 3½ percent of GNP each year between 2016 and 2021, and it will support more than 45,000 construction-related jobs.

The Government's strategy for the construction sector, *Construction 2020*, sets out a cross-government action plan to help support a sustainable construction sector over the longer term.

The Government has through the National Development Plan and the National Spatial Strategy made clear its objective to facilitate more balanced social and economic growth throughout the State. Such balanced regional growth will result in an increased requirement for social and economic infrastructure with a consequential increase in demand for recovery and re-use of inert Construction and Demolition waste.

### 1.1.3 NATIONAL WASTE POLICY

The waste policy statement entitled "Taking Stock and Moving Forward" published in April 2004 reiterates a commitment to the implementation of the internationally recognised waste

<sup>1</sup> Department of the Taoiseach, (April 2011) *National Reform Programme for Ireland under the Europe 2020 Strategy*, Dublin: Department of the Taoiseach.

<sup>2</sup> Department of Finance, (July 2010) *Infrastructure Investment Priorities 2010-2016*, Dublin: Department of Finance.

<sup>3</sup> Department of Public Expenditure and Reform, (September 2015) *Building on Recovery: Infrastructure and Capital Investment 2016-2021*, Dublin: Department of Public Expenditure and Reform.

management hierarchy. The integrated waste management approach is to implement maximum recycling, recovery of energy from residual waste and moving away from landfill disposal.

A policy direction WIR 04/05 was issued on 3rd May, 2005 in relation to the movement of waste. This was unforeseen in "Taking Stock and Moving Forward" and was intended to address concerns that relevant regulatory authorities were taking an unnecessarily restrictive approach in regard to the inter-regional movement of waste. This guidance is intended to provide greater clarity in regard to the appropriate application of the proximity principle so as to facilitate the provision of environmentally sustainable and economically viable waste infrastructure in accordance with national policy.

Section 21A. (1) of the amended Waste Management Acts 1996 to 2011 states that:-

The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:

- (a) prevention;
- (b) preparing for re-use;
- (c) recycling;
- (d) other recovery (including energy recovery); and
- (e) disposal.

Measures at the top of the hierarchy have the inherent potential to be more environmentally beneficial and resource efficient. It implies that higher order strategies should be considered first and used where practicable.

Waste prevention is the top priority and when this has been exercised to its full potential then one should attempt to get the maximum benefit from the remaining waste at minimum environmental cost. This is the basis of the '**3 Rs**' which take account of the next steps in the hierarchy:

**Reduction (Minimisation)** is top of the list since it is the only complete way to reduce environmental impacts.

**Reuse** is generally better than recycling since there is no processing stage which would use energy and create its own waste.

**Recycling** is generally better than recovery of secondary materials or energy since it achieves a greater reduction in the demand for primary resources.

To increase the likelihood of applying the Reuse, Recycling, Recovery and Treatment strategies to the best potential it is usually important that the various components in the waste stream are segregated as much as possible so as to minimise contamination. This usually requires segregation at source and systems to prevent the mixing of different waste streams.

A new National Waste Management Policy was adopted in 2012, and the new Regional Waste Plans, due to be in place in 2014, are required to reflect this new National Policy (DoECLG 2012). A key objective of waste management plans is to "ensure self-sufficiency of waste management infrastructure within the State". The Plan incorporates several key obligations imposed by the 2008 Waste Framework Directive:

- Application of the Waste Hierarchy as a priority in legislation and policy
- Recovery of waste where practicable, or disposal without risk to environment or human health
- Prohibition of the abandonment or uncontrolled disposal of waste
- Establishment of an integrated network of waste disposal installations and of installations for the recovery of mixed municipal waste - aiming for self-sufficiency
- A system of permits and registration for all those involved in collecting, disposing of, preparing for the recovery of, or recovering waste
- Cost of waste management borne by original waste producer, through adoption of the polluter pays principle

#### 1.1.4 THE EASTERN AND MIDLAND REGIONAL ASSEMBLY

Following on from the enactment of the Local Government Reform Act 2014 a number of changes were made to the regional structures in Ireland where the eight regional authorities were dissolved. Three new Regional Assemblies came into effect on 1st January 2015, namely the Southern Regional Assembly, the Eastern and Midland Regional Assembly and the Northern & Western Regional Assembly.

The Eastern and Midland Regional Assembly, has twelve constituent local authorities split into three Strategic Planning Areas as follows –

Dublin	Fingal, Dublin City, South Dublin, Dun Laoghaire-Rathdown
Eastern	Louth, Kildare, Meath, Wicklow
Midlands	Longford, Laois, Offaly, Westmeath

Prior to the establishment of the Eastern and Midland Regional Assembly on 1st January 2015, the three previous Regional Authorities within Eastern and Midland Region produced individual Regional Planning Guidelines (RPG's). These planning guidelines set out a strategic planning framework for their respective three areas and will remain in force until at least 2016.

The implementation of the RPGs are an integral part of the Government's programme to enable Ireland's planning system to play an important role in the national economic recovery by delivering a plan-led planning system where spatial plans are aligned to benefit the economy, environment and provide for an improved quality of life.

This process has sought to prioritise future infrastructural investment at a regional and local level, whilst promoting the growth of designated settlements.

It is proposed that the (RPG's) will be replaced by a Regional Spatial & Economic Strategy for the region.

*"The objective of regional spatial and economic strategies shall be to support the implementation of the National Spatial Strategy and the economic policies and objectives of the Government by providing a long-term strategic planning and economic framework for the*

*development of the region for which the strategies are prepared which shall be consistent with the National Spatial Strategy and the economic policies or objectives of the Government.”* (sec23 Planning and Development Act 2000).

#### 1.1.5 REGIONAL PLANNING GUIDELINES GREATER DUBLIN AREA

The National Spatial Strategy (NSS) for Ireland sets out the basis on which all areas of the country will have the opportunity to develop to their potential within a national spatial planning framework for the period up to 2020 (DoEHLG 2002). The Regional Authorities have been entrusted with the important responsibility of implementing the NSS at regional level.

The Planning and Development Act, 2000 conferred on the Regional Authorities the power to make Regional Planning Guidelines (RPGs) for their functional areas. The RPG, which also incorporate a socioeconomic development strategy, are intended to constitute a strategic planning framework for the period 2010-2022 for the development of each region and for inter-regional cooperation. The strategic policies and objectives set out in the RPG will form the backdrop for socio-economic planning by national and regional agencies and will constitute the policy framework within which county, city, town and local area development plans will be made.

The Regional Planning Guidelines (RPGs) extend the implementation of the National Spatial Strategy (NSS) down to the regional and local levels, by linking national spatial policy with planning by local authorities.

The Regional Planning Guidelines for the Greater Dublin Area (GDA) combines two Regional Authority areas - the Dublin Regional Authority and the Mid-East Regional Authority. The Guidelines cover the Councils of Dun Laoghaire-Rathdown, Dublin City, Fingal and South Dublin in the Dublin Region and Kildare, Meath and Wicklow County Council areas in the Mid-East Region.

The Regional Planning Guidelines (RPG's) set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS).

The RPGs seek to deliver policies integrating land use, transport, economic growth and investment in utilities - water, broadband and energy so that the GDA can move towards becoming a sustainable high quality location for business, residents and visitors.

It is the strategic policy (PIP5) of the GDA to ensure, from environmental, business and public health needs, that waste management remains a priority for local authorities and waste management regions in continuing to invest in promoting and facilitating reuse and recycling by residential and commercial sources and that high standard options for treatment and final disposal of waste are available within the GDA.

The Waste management policy for the GDA needs to:

- Expand policies to promote and support source reduction and reuse, to reduce stresses on waste management infrastructure and to create better synergies between businesses and across sectors;
- Promote improvements to quality of recycling infrastructure to reduce costs;

- Continue to invest in increasing opportunities for recycling and safe disposal of waste;
- Development of opportunities, as outlined above, shall not compromise the integrity of ecologically sensitive areas, in particular infilling with inert materials which can give rise to fragmentation of habitats. A change in the regulations that effectively exempts land filling once it achieves land reclamation would support this endeavour.

Preservation of the environment and conservation of diminishing natural resources are key principles inherent within the concept of sustainable development. The RPGs support the waste management hierarchy and increased and coordinated effort should be made in the areas of source reduction and re-use of waste across the industrial, commercial and residential sectors of the GDA.

Local Authorities should seek to anticipate burgeoning waste streams, identify opportunities to integrate facilities where appropriate and identify current or future opportunities for re-use of waste, for example, the re-use of secondary aggregates as physical infrastructure construction bases or the potential reuse of suitable soil material in amenity projects or landfill restoration.

Strategic recommendations for the GDA include:

- PIR39** The reuse of waste should be encouraged and reinforced through encouragement of business clustering across the GDA. Opportunities to facilitate source reduction, the reuse of wastes, by-products and associated energy throughout the GDA should be examined as part of economic policies. Development of these opportunities shall not compromise the integrity of ecologically sensitive areas, in particular infilling with inert materials which can result in loss and fragmentation of wetlands.
- PIR 40** Waste management facilities should be appropriately managed and monitored according to best practice to maximize efficiencies and to protect human health and the natural environment.

#### 1.1.6 REGIONAL WASTE MANAGEMENT PLAN

The waste management regions have recently been reconfigured, and Kildare now comes under the Eastern & Midlands Waste Region (EMWR). The EMWR was established following on from the publication of Government Policy document "A Resource Opportunity - Waste Management Policy in Ireland" (DoECLG 2012), which reduced the Waste Management Regions from 10 to 3. The region includes Dublin City, Dun Laoghaire -Rathdown, South Dublin, Fingal, Wicklow, Kildare, Laois, Offaly, Westmeath, Longford, Meath & Louth County Councils.

The Eastern - Midlands Region Waste Management Plan 2015 – 2021 provides the framework for waste management for the next six years and sets out a range of policies and actions in order to meet the specified mandatory and performance targets. Most importantly the plan seeks to assist and support the community and local business to develop resource efficiency and waste prevention initiatives.

The economic recession impacted on the generation of wastes in the region, specifically wastes from the building sector, with annual records showing a steady decline in quantities for

major waste streams. Since the beginning of 2014 the economy has shown signs of sustained recovery, and this is expected to continue, which will likely lead to growth in waste generation over the period of the plan. The continued management of wastes in a safe and sustainable manner will be a real challenge into the future.

The strategic approach of the plan places a stronger emphasis on preventing wastes and material reuse activities. The plan will also focus on enhancing the collection of quality materials from discarded waste to build on the positive progress made in recycling. The plan will strive to improve the recovery and generation of energy by maximising the resource value of the materials and energy embodied in residual wastes. Finally, the plan will seek to further reduce the role of landfilling in favour of higher value recovery options.

The following subsections provides a summary of the EMRWP 2015 – 2021 including relevant policies with respect to management of Construction and Demolition waste.

#### 1.1.6.1 CONSTRUCTION AND DEMOLITION (C&D) WASTE

Construction and Demolition (C&D) waste is described in the EPA National Waste Reports as all waste that arises from C&D activities.

The national policy document, Changing Our Ways (1998), set a target of 85% recycling of C&D waste by 2013. The local authorities recognise the extent of inert, non-hazardous and hazardous waste streams being generated in the region and nationally. The management of these streams places specific obligations on the authorities, and the policies and actions of the plan are designed to ensure that the authorities are contributing to proper management.

#### Policy:

- A3. Contribute to the improvement of management performance across all waste streams through the implementation of policy actions and monitor progress towards national targets.

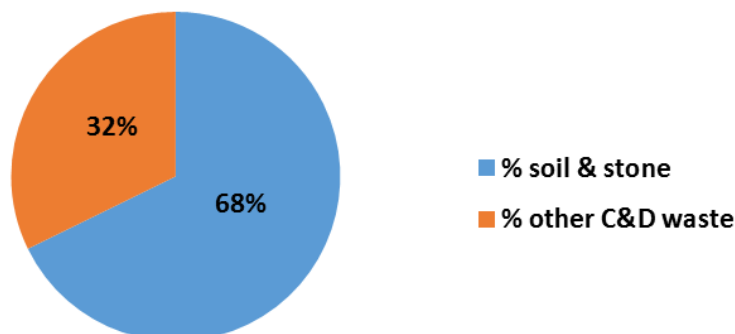
The 2008 EU WFD Directive also requires a 70% reuse, recycling and materials recovery rate target of non-soil and stone construction and demolition waste to be achieved by 2020. The State is exceeding this target, with a rate of 97% recorded in 2012.

As the construction sector begins to record increasing activity, the importance of construction and demolition plans and their enforcement must be stressed. Equally, the appropriate processing facilities need to be in place to facilitate increased reuse, recycling and recovery of this waste stream.

C&D waste is primarily collected by private authorised collectors, with only a small percentage collected at civic amenity facilities. The C&D sector has been showing signs of recovery in the region since 2012 and has gathered pace significantly within the last year with the commencement of a number of significant construction projects.



The soil and stone waste collected within the EMR is primarily managed at local authority permitted infill sites with the other C&D waste types primarily managed at EPA licensed activities.



**Figure 1.1 C&D Wastes Collected in the Eastern-Midlands Region in 2012**

Traditionally, the recovery of much of the C&D waste stream has been managed by placing it in a variety of land use applications. This treatment, collectively known as backfilling, includes land reclamation, improvement or infill works. The largest fraction of the C&D waste stream arising is soil and stones, which (if uncontaminated) typically undergoes little if any treatment prior to recovery at these sites. Many sites selected for infill facilities are considered marginal agricultural land, and may include wetland habitats or lands subject to flooding. There is an increasing recognition of the potential ecological and biodiversity value of these wetland sites. There is also a sense that at many of these sites, the deposition of waste material rather than improvement or development of the land was the primary purpose of the activity.

Given the sharp decrease in the number of operational landfills nationally, which have been a significant outlet for C&D waste in the past, alternative recovery options will be required to facilitate the recovery of C&D waste arising in future years. It needs to be considered if the placement of inert waste at many of the types of infill sites used in the past is an appropriate land-use strategy or indeed best use of a potentially recyclable material. Concrete, stone and other masonry-type waste can be crushed and screened and used as a substitute for virgin quarried stone material in a variety of engineering applications if the appropriate technical criteria have been met, e.g. road construction, access tracks for agricultural or forestry holdings.

Quarries also frequently require large quantities of soil material to fill voids, and for other remediation and landscaping applications.

There is significant potential for recycling of the C&D waste stream given the nature of its characteristics. Articles 27 and 28 of the European Communities (Waste Directive) Regulations 2011 set out the grounds by which a material can be deemed to be a by-product rather than a waste (Article 27) and the grounds for deeming a material to be no longer a waste (Article 28).

Much of the inert fraction of the C&D waste stream, particularly concrete, can be recycled and used in engineering applications as a replacement for virgin materials. At present, recycling is

not being distinguished from recovery in the recording and reporting of waste statistics for construction and demolition waste.

#### 1.1.6.2 RECOVERY – BACKFILLING

Backfilling activities (of inert waste), which meet the recovery definition and are in compliance with Articles 4 and 13 of the WFD, sit on the other recovery tier of the waste hierarchy. Local authorities in the region authorise such activities through the award of WFPs and CoRs.

Similarly, the EPA authorises significant backfilling of inert waste at large sites such as old quarries for restoration purposes.

Backfilling activities make up a significant treatment capacity in the region at present. Local authority authorised sites have a capacity of 0.9 million tonnes, with significant pending capacity for facilities at waste licence application stage. Local authority authorised sites generally have a shorter lifespan than EPA licensed sites and operations can often cease at these sites within the life of the permit, i.e. five years. EPA authorisations cover more substantial operations with a longer lifetime capacity. Utilisation of active local authority capacity at backfilling/land improvement sites was 48% in 2012. Activity in the sector is expected to increase over the plan period as economic recovery continues to build nationally.

#### Policies:

- E13. Future authorisations by the local authorities, the EPA and An Bord Pleanála must take account of the scale and availability of existing back filling capacity.
- E14. The local authorities will co-ordinate the future authorisations of backfilling sites in the region to ensure balanced development serves local and regional needs with a preference for large restoration sites ahead of smaller scale sites with shorter life spans. All proposed sites for backfilling activities must comply with environmental protection criteria set out in the plan.

In the face of increased demand for backfilling authorisations there is a need for better coordination between local authorities in the region. This is to ensure facilities are planned and developed at suitable sites and do not present a risk to European designated sites and existing biodiversity and habitats. It is recommended that the lead authority liaise with relevant stakeholders (including the EPA and the DAHG) to ensure appropriate measures are in place for the control and spread of invasive alien species at backfilling sites in the region where necessary.

### 1.1.6.3 RECYCLING – MATERIAL REPROCESSING

The reprocessing of waste materials into products, materials or substances “*whether for the original or other purposes*” falls within the recycling definition. Ireland’s reprocessing industry for secondary waste materials is limited, with the greater part of municipal recyclable wastes being exported.

In many cases the quantity of feedstock available in Ireland is not sufficient to make the development of indigenous recycling or reprocessing facilities economically viable.

Over the lifetime of the plan the local authorities in the region will support the development of indigenous secondary waste market reprocessing.

#### Policies:

E19. The waste plan supports the development of indigenous reprocessing and recycling capacity for the treatment of non-hazardous and hazardous wastes where technically, economically and environmentally practicable. The relevant environmental protection criteria for the planning and development of such activities need to be applied.

### 1.1.6.4 FACILITY AUTHORISATIONS BY LOCAL AUTHORITIES

Local authorities will implement a coordinated and considered approach to the future planning of treatment capacities in the region through better communication (between authorising bodies) and ongoing updates of regional capacity data.

#### Policies:

E21. The Local Authorities will review the approach to authorising waste treatment facilities requiring a waste facility permit or certificate of registration having regard to the need to achieve consistency of approach between planning approval and operational capacity.

### 1.1.7 GUIDELINES

The Dept. of the Environment, Heritage & Local Government has published “Quarries & Ancillary Activities – Guidelines for Planning Authorities” in April 2004 (DoEHLG 2004b). In this publication it is stated that as part of best practice.

- the availability of a choice of raw aggregates and C&D waste-derived aggregates for the purposes of new construction would serve to limit the depletion of natural resources.
- Quarries should consider using inert C&D waste arisings, which do not have the potential to displace natural aggregates, for reinstatement and restoration purposes on the quarry site.

### 1.1.8 COUNTY DEVELOPMENT PLAN

The purpose of the Kildare County Development Plan 2011-2017 is to set out an overall strategy for the proper planning and sustainable development of the area.

The development plan vision statement is “*To build on the strengths of the county by facilitating sustainable development, through the provision of high quality employment opportunities and residential developments supported by quality urban and rural environments with physical and social infrastructure to support communities throughout the county*”.

The aim of the Kildare County Council Development Plan in respect of Environmental Services is “To conform to European, National and Regional policies in relation to the provision of waste management and to protect and enhance water, air and noise quality”. The following policy statements in the Kildare County Council Development Plan are considered relevant with respect to the proposed waste recovery activities at Kilmeage:

#### Waste Management

<b>WM 1</b>	To have regard, in the assessment of planning applications for waste management facilities <i>inter alia</i> , to the Waste Management Plan for County Kildare then prevailing, Waste Management Act 1996, EU Landfill Directive, EPA Landfill Manuals, EU Packaging and Packaging Waste Directive and DoEHLG policy statements viz. Changing Our Ways and Preventing and Recycling Waste – Delivering Change and Taking Stock and Moving Forward.
<b>WM 2</b>	To require the submission of either a certificate of exemption or a valid planning permission for a Waste Facility Permit application, in accordance with the Waste Management (Facility Permit and Registration) Regulations 2007 as amended.
<b>WM 4</b>	To encourage waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste. Where waste management is not being carried out properly, the Waste Management Acts 1996 to 2008, will be used as a means of ensuring specific national policies and regulations are adhered to.

#### Environmental Services

The following objectives in the Kildare County Council Development Plan are considered relevant with respect to the proposed waste recovery activities at Kilmeage:

<b>EN 2</b>	To facilitate the implementation of the County Kildare Waste Management Plan 2005–2010 and any subsequent revisions thereof during the period of this Plan.
<b>EN 9</b>	To require the submission of Annual Environmental Reports (which require ongoing monitoring of specified environmental parameters) on specified developments through the planning process.

The proposed facility will involve the recovery of inert C&D waste, mainly soil and stone, for the beneficial use of backfilling and restoring disturbed and degraded land back to agricultural

use. Clean, uncontaminated soils are suitable for quarry restoration projects, whereas clean brick, block and concrete rubble are suitable for recovery as secondary aggregates for use in the construction of hard standing areas, access roadways, drainage, etc. The recovery of C&D waste is essential to divert reusable inert waste from disposal in landfill, as required under the Waste Framework Directive 2008 (2008/98/EC), and the European Communities (Waste Directive) Regulations, 2011 (S.I. 126 of 2011). Thus, the facility will result in a reduction of quantities of such waste being sent to landfill sites in the region. Furthermore, the recovery of waste also has the environmental benefit of enabling the lands to be restored to agricultural use in accordance with the restoration scheme proposed.

### ***Rural Development – Sand and Gravel Extraction***

Insofar as the restoration at the quarry site, is being restored using imported inert soils, sections of Chapter 10 of the CPD dealing with rural development and extractive industries are relevant.

In section 10.7 of the County Development Plan, the Council acknowledges that gravel resources are important to the general economy and provide a valuable source of employment in some areas of the county. The Council's aim in terms of Sand and Gravel Extraction is *"To ensure that adequate supplies of aggregates are available to meet the future needs of the county and region in line with the principles of sustainable development and environmental management"*.

The nature of the extractive industry is such that the development is required where the resource occurs, and may give rise to land use and environmental issues. However, it is essential that aggregates are sourced without significantly damaging the landscape, environment, groundwater and aquifer sources, road network, heritage and/or residential amenities of the area. In this regard, it is important to note that the Council states that *"Sand and gravel workings on the other hand can easily be restored to agricultural use"*.

In respect of the Extractive Industry, it is the policy of Kildare County Council:

<b>EI 1</b>	To have regard to the Quarries and Ancillary Activities Guidelines for Planning Authorities (2004) published by the DoEHLG or as may be amended from time to time.
<b>EI 4</b>	To ensure that extraction activities address key environmental, amenity, traffic and social impacts and details of rehabilitation.
<b>EI8</b>	To require a detailed landscaping plan to be submitted with all planning applications indicating proposed screening for the operational life of the site. The predominant use of native plant species in the proposed landscaping plan is encouraged.
<b>EI 10</b>	To require detailed landscaping and quarry restoration plans to be submitted with each application. Habitats and species surveying shall be carried out and shall influence the restoration plan for the site.
<b>EI 12</b>	To ensure that all existing workings are rehabilitated to suitable land uses and that extraction activities allow for future rehabilitation and proper land use management.

In respect of the Extractive Industry, it is an objective of Kildare County Council:

**EO 2** To ensure that the extractive industry minimises and/or mitigates any adverse visual and/or environmental impacts on the built or natural environment through adherence to the EPA publication Environment Management in the Extractive Industry (Non-scheduled minerals) 2006 and any subsequent revisions and the requirements of the Programme of Measures from the River Basin Management Plans.

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

## 1.2 REFERENCES

1. DCC (2013) Eastern & Midlands Regional Waste Management Planning Briefing Note, Dublin City Council (DCC), Dublin, Ireland, [Available at <http://www.dublincity.ie>] 4 p.
2. DoECLG (2012) A Resource Opportunity: Waste Management Policy in Ireland, Dept. of Environment, Community and Local Government (DoECLG), Dublin, Ireland, [Available at <http://www.environ.ie/en/Publications/Environment/Waste/WasteManagement/FileDownload,30729.en.pdf>] 53 p.
3. DoEHLG (2004a) Waste Management: Taking Stock and Moving Forward, Dept. of the Environment, Heritage and Local Government (DoEHLG), Dublin, Ireland, [Available at <http://www.environ.ie/en/Environment/Waste/PublicationsDocuments/FileDownload,1471,en.pdf>], 57 p.
4. DoEHLG (2004b) *Quarries and Ancillary Activities - Guidelines for Planning Authorities*, Dept. of the Environment, Heritage and Local Government (DoEHLG), Dublin, Ireland, [Available at <http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/>], 46 p.
5. DoELG (2002) The National Spatial Strategy for Ireland 2002-2020, Dept. of the Environment and Local Government (DoELG), Dublin Ireland, [Available at <http://nss.ie/pdfs/Completea.pdf>] 160 p.
6. DoF (2011) Medium-Term Fiscal Statement, November 2011, Dept. of Finance (DoF), Dublin 2, Ireland, [Available at <http://www.finance.gov.ie/sites/default/files/Fiscalstat.pdf>] 52 p.
7. DoPER (2011) Infrastructure and Capital Investment 2012-16: Medium Term Exchequer Framework, Dept. of Public Expenditure and Reform (DoPER), Dublin, Ireland [Available at <http://www.per.gov.ie/infrastructural-and-capital-investment-2012-16-medium-term-exchequer-framework/>]
8. DoPER (2015) Building on Recovery: Infrastructure and Capital Investment 2016-2021, (DoPER), Dublin, Ireland, [Available at <https://www.per.gov.ie/wp-content/uploads/NCIP-Online.pdf>] 54 p.
9. DOT (2004) National Development Plan 2007-2013, Dept. of the Taoiseach (DOT), Dublin, Ireland, [Available at <https://www2.ul.ie/pdf/932500843.pdf>] 300 p.
10. Dublin Regional Authority & Mid-East Regional Authority (2010) Regional Planning Guidelines for the Greater Dublin Area 2010-2022, Dublin Regional and Mid-East Regional Authorities, Ireland, [Available at <http://www.rpg.ie/>] 204 p.
11. EMWR(2015) *The Eastern - Midlands Region Waste Management Plan 2015 – 2021* Eastern & Midlands Waste Region (EMWR), Block 1, Floor 6, Civic Offices, Dublin 8, Ireland, [Available at <http://emwr.ie/>] 335 p.

12. EPA (2006) *Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals)*, Environmental Protection Agency (EPA), Johnstown Castle, Co. Wexford, Ireland, [Available at <http://www.epa.ie/pubs/>] 28 p.
13. EPA (2012a) *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)*, Environmental Protection Agency (EPA) Johnstown Castle, Co. Wexford, Ireland, [Available at <http://www.epa.ie/pubs/>] 78 p.
14. EPA (2012b) *Sustainable Resource Use, Consumption and Waste, Chapter 5, Ireland's Environment*, Environmental Protection Agency (EPA), Johnstown Castle, Co. Wexford, Ireland, [Available at <http://www.epa.ie/pubs/>] pp. 59-72
15. Kildare County Council (2011) *Kildare County Development Plan 2011-2017*, Kildare County Council, Naas, Co. Kildare, Ireland, [Available at <http://kildare.ie/CountyCouncil/Planning/DevelopmentPlans/KildareCountyDevelopmentPlan2011-2017/>] Vols. 1-2.

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