# 11.0 MATERIAL ASSETS - WASTE

## 11.1 Introduction

This Chapter of the EIAR assesses the impact the proposed development may have on waste management for the site and for the area. This Chapter was prepared by Imelda Shanahan and Nathaniel Blue of TMS Environment Ltd. Imelda has over 30 years professional experience in preparing assessments of this type for various different types of development. Imelda has a BSc (Hons) in Chemistry from University College Dublin and a PhD in Physical Chemistry, she is a Chartered Chemist and a Fellow of the Institute of Chemistry of Ireland and a Fellow of the Royal Society of Chemistry. Nathaniel has a Masters in Environmental Sciences from Trinity College Dublin (2021) and a BSc in Environmental Science from the University of Seattle (2020).

The proposed development at the Breedon Cement quarry at Kinnegad, Killaskillen, County Meath comprises the deepening of the north-western portion of the current permitted limestone quarry by four extractive benches to 10m OD, over an area of 4.13 hectares. The depth will match the permitted depth of the adjoining quarry area as permitted under planning Ref 98/2026 (An Bord Pleanala Ref PL.17.111198). The applicant's wider landholding comprises an existing limestone quarry and an existing cement plant.

The proposed development will be served by an existing haul road located entirely within the site boundaries and from the existing vehicular access on the L8021 to the northeast of the site. The proposed development will not result in any increase in the output of the existing limestone quarry or to the production capacity of the existing cement plant to the south, and there will be no change to the operation of the cement manufacturing process as a result of the proposal.

## 11.2 Methodology

The assessment of the impacts of the proposed development arising from the consumption of resources and the generation of waste materials was carried out taking into account the methodology specified in relevant guidance documents, along with an extensive document review to assist in identifying current and future requirements for waste management including national and regional waste policy, waste strategies, management plans, legislative requirements and relevant reports.

An assessment is made of the likely impact of the waste produced and mitigating measures in terms of appropriate waste management are put forward to minimise the levels of waste generated in the first place. The following Guidance was considered in carrying out the impact assessment:

- *Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2002);*
- *Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (EPA, 2003);*
- *Guidelines On The Information To Be Contained In Environmental Impact Assessment Reports* (EPA, May 2022);
- *Draft Advice Notes for Preparing Environmental Impact Statements,* Draft, (EPA draft September 2015a);
- *Draft Revised Guidelines on the Information to be Contained in Environmental Impact Statements* (EPA draft September 2015b);

- *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment,* (August 2018);
- *A Waste Action Plan for a Circular Economy: Ireland's National Waste Policy 2020-2025*;
- *The Waste Management Act 1996*;
- *The Environment (Miscellaneous Provisions) Act 2011;*
- Eastern- Midlands Region Waste Management Plan 2015-2021;
- Meath County Development Plan 2021 - 2027

## 11.3 Waste Management Policy and Regulation

### 11.3.1 Introduction

The subject site is fully situated within the Meath local authority area and consequently the proposed development must comply with the waste management requirements of Meath County Council as well as the relevant National and Regional waste management requirements. This section sets out a summary of the principal National, Regional and Local waste management requirements which must be considered for this proposed development.

### 11.3.2 National Waste Policy and the Circular Economy

The Department of Housing, Planning and Local Government has primary responsibility for waste policy and legislation at a national level in Ireland. A significant proportion of national policy is governed by European Union (EU) initiatives. Such initiatives are usually enacted through European Directives which are then transposed into Irish law through our own legislation.

The current national waste policy, *A Waste Action Plan for a Circular Economy: Ireland's National Waste Policy 2020-2025*, was published in September 2020 and sets out policy measures and actions for each waste management option as well as measures and actions for compliance and enforcement of the waste legislation applicable. The new policy document shifts focus away from waste disposal and onto the production chain. The policy document contains over 200 measures across various waste areas including Circular Economy, Municipal Waste, Consumer Protection and Citizen Engagement, Plastics and Packaging, Construction and Demolition, Textiles, Green Public Procurement and Waste Enforcement. The previous national waste policy, A Resource Opportunity – Waste management policy in Ireland, (2012), drove delivery on national targets under EU legislation, but the Irish and international framework has changed in the intervening years and change was required.

Irish waste policy is grounded in the European Union's concept of a waste management hierarchy. The European Union's waste management hierarchy is a series of waste management options, presented in decreasing order of environmental and economic desirability. The hierarchy states that the preferred option is prevention, followed by re-use, recycling, recovery, with the least desirable option being landfill. The overall intent of these policy statements is to move Irish waste management away from disposal and towards the more favoured options higher up the hierarchy and ultimately to achieve the full transition to a Circular Economy. The overall objectives of the current Action Plan are as follows:

- To shift the focus away from waste disposal and treatment by ensuring that the useful lifetime of materials and products is prolonged;

- To shift the burden of environmental responsibility for disposable goods to the producer;
- To ensure that measures for supporting sustainability are fostered;

The current legislative framework relies on the Waste Management Act 1996 and the Environment (Miscellaneous Provisions) Act 2011 as the principal vehicles through which national waste policy is enacted. The new Policy envisages that a new Waste Management (Circular Economy) Bill will be introduced to provide the legislation required for new measures to support the new Waste Policy.

### 11.3.3 Regional Waste Policy

For the purposes of waste management planning, Ireland is divided into three different regions namely, Eastern-Midlands, Southern and Connacht-Ulster regions with each region led by a Regional Waste Management Planning Office. The Eastern-Midlands Region includes the local authorities of Dublin City, Dún Laoghaire-Rathdown, Fingal, South Dublin, Kildare, Louth, Laois, Longford, Meath, Offaly, Westmeath and Wicklow.

The subject site is within the jurisdiction of Meath County Council who have adopted the Eastern- Midlands Region Waste Management Plan 2015-2021. The Plan provides a framework for the prevention and management of waste in a sustainable manner in Meath and the other local authority areas.

The strategic vision of the regional waste plan is to rethink the current approach to managing waste, by viewing waste streams as valuable material resources. It is hoped that making better use of available resources and reducing the leakage of materials as wastes will deliver benefits economically and environmentally to the region.

The plan contains a number of key measures that encourage a positive change in the attitudes and actions of householders, business and industry towards waste prevention. It also seeks to ensure that the Eastern-Midlands Region moves its management of waste from a traditional disposal model to a circular economy model so that waste becomes a future resource.

Under the terms of the Waste Management Acts 1996 to 2011, the County Development Plan is deemed to include the objectives of the Waste Management Plan for the area. The Meath County Development Plan 2021 – 2027 sets out a number of objectives and actions for Meath in line with the objectives of the waste management plan. Meath County Councils Waste Management Strategy is grounded in EU and National policy and can be summarised by the waste hierarchy of prevention, recycling, energy recovery and disposal. The Plan identifies the primary challenge over the Plan lifetime is to continue to deliver, maintain and expand high quality waste management infrastructure that will adequately cater for a growing resident population and business sector.

## 11.4 The Receiving Environment

### 11.4.1 Introduction

As noted above the subject site is fully situated within the Meath local authority area and consequently the proposed development must comply with the waste management requirements of Meath County Council as well as the relevant National and Regional waste management requirements. The facility is licenced by the Environmental Protection Agency

under the Industrial Emissions Directive and as such waste management is regulated by conditions in the Licence.

### 11.4.2 Waste Management at Breedon Cement

Waste management is an integral part of the applicant's Environmental Management System (EMS), which is accredited to ISO 14001, the Environmental Standard for Environmental Management Systems. Part of Breedon's Environmental Policy commits them to '*promote improvements in energy efficiency and resource usage while having due regard for sustainable development and waste minimisation*'. The core principles of their waste management strategy are:

- to prevent and minimise waste at source
- to reuse waste where possible by returning it to the production process
- to segregate and store any wastes that cannot be reused
- to dispose of any waste in an environmentally sensitive manner that cannot otherwise be recycled or recovered.

The waste management objectives at Breedon Cement are regularly reviewed and updated and company-wide initiatives have been developed to assist in achieving these targets. Such initiatives include:

- review of production processes and practices to include waste minimisation at source;
- training of staff to promote good waste management practices;
- strategically located recycling infrastructure; and
- take-back agreements with suppliers.

Breedon Cement Ltd is licensed by the Environmental Protection Agency (EPA) which ensures that the company operates according to Best Available Techniques (BAT). BAT ensures that emphasis is placed on pollution prevention techniques including cleaner techniques and waste minimisation as opposed to end-of-line treatment. The Industrial Emissions (IE) Licence (Register No. P0487-07) requires Breedon to monitor, record and report on all the wastes generated on their site and its subsequent handling, storage, recovery and/or disposal. The IE licence also requires that Breedon set specific objectives and targets in their environmental management system, which encourages improvements in environmental performance at the facility.

The Operational Waste Management Plan for the facility is managed through the company's Environmental Management System and is overseen by the EPA.

## 11.5 The proposed development

### 11.5.1 Construction Phase

There is no significant construction associated with the proposed development. The proposed extension is within the existing quarry footprint and is located within an area where quarrying activity has already been permitted and undertaken. The area has already been quarried so that the overburden materials have already been removed and are being managed within the existing permission. Since the proposed activity simply involves deepening the permitted quarry in this area, and preparations are already permitted and complete, there will be no waste generated during the construction phase.

### 11.5.2 Operational Phase

The deepening of the limestone quarry will not result in any increase in output from the facility. There will therefore be no change in the rate of waste generation at the facility relative to the permitted situation. Raw material extraction rates will remain the same as currently permitted and there will be no change to the cement manufacturing rate or output as a result of the proposal.

## 11.6 The Predicted Impact of the Proposed Development

### 11.6.1 Construction Phase

There is no construction required for the proposed development and consequently no waste generation and no waste management impacts. The predicted impacts on the receiving environment are therefore considered to be imperceptible.

### 11.6.2 Operational Phase

There are no changes in rates of production proposed for the facility and therefore there will be no change to the current levels of operational waste arising. The waste arisings from the proposed development when fully operational will not impact on the waste environment at the facility. The Environmental Management System currently in place at the facility ensures that all waste at the facility is correctly and efficiently managed as it arises.

The predicted impacts on the receiving environment of the wastes generated during the operational phase are considered to be imperceptible.

## 11.7 Remedial and Mitigation Measures

### 11.7.1 Construction Phase

There will be no new or additional waste generated as a result of the current proposal. Since there is no construction waste and no construction phase, there is no requirement for remedial or mitigation measures and none are proposed.

### 11.7.2 Operational Phase

There will be no new or additional waste generated as a result of the proposal. There is therefore no requirement for remedial or mitigation measures. All waste will continue to be handled in accordance with existing waste management procedures and in accordance with the conditions of the company's IE Licence.

## 11.8 Cumulative Impacts

The cumulative impacts of the proposed development in conjunction with current and future developments in the vicinity of the subject site are considered in this section. Guidance published by the European Commission (1999, Guidelines for the Assessment of Indirect and Cumulative Effects as well as Impact Interactions) was considered in carrying out this element of the assessment. A review of other existing and / or approved projects in the vicinity of the site was carried out and these projects were considered to determine whether any of these existing / approved projects will likely have significant cumulative effects in combination with

the proposed project.

Permission has been sought (Ref 22/958) to build a Solar PV Energy Development on lands to the north east of the proposed quarry deepening area on lands owned by Breedon Cement. The proposed solar development extends over an area of approximately 21.8 hectares in two land parcels (eastern parcel c.18.5 hectares, western parcel c. 3.3 hectares).

There is no potential for cumulative impacts to arise during the construction phase of the proposed solar development. The proposed solar development construction phase would involve transport of materials to the site, some ground preparation activity including preparation of site roads and some construction works for infrastructure associated with the proposed solar development. These activities have some limited potential for generation of waste. The proposed development will not lead to the generation of waste as all materials recovered from the quarry will be utilised in the cement manufacturing process on the site.

## 11.9 Residual Impacts

There will be no residual impacts arising from construction. Potential operation phase impacts are predicted to be imperceptible and long-term.

## 11.10 Interactions Arising

The main interactions with waste management are in relation to human beings. The impact on human beings living in the area of the proposed development has been addressed above for both the construction and operational phase of the proposed development. The impact assessment shows that waste will continue to be managed in accordance with all local, regional and national waste management legislation and in accordance with the requirements of the IE Licence. This interaction is described as neutral for the operational phase and is quantified as imperceptible.

## 11.11 Conclusions

There will be no adverse or unacceptable impact on the receiving environment in terms of waste management as a result of the proposed development. Impacts are predicted to be imperceptible.