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# Appropriate Assessment Screening and Natura Impact Statement

Additional Soil Intake and Extension of Planning Permission for Existing Recovery Facility at Halverstown, Kilcullen, Co. Kildare

Prepared for: Kilsaran Concrete Unlimited Company

Prepared by: SLR Environmental Consulting (Ireland) Ltd

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Making Sustainability Happen

### **Revision Record**

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## 1.0 INTRODUCTION

### 1.1 Background



This document presents an Appropriate Assessment of the likely significant effects on Natura 2000 sites in respect of a proposal by Kilsaran Concrete Unlimited Company (Rereafter 'Kilsaran') to

- (i) increase the toral permitted intake of soil and stone and broken rock to its existing soil recovery facility at Halverstown, Kilcullen, Co. Kildare, from 1.2 million tonnes to 2.06 million tonnes and
- (ii) extend the life of the existing facility by 3 years (to December 2029) in order to accommodate the additional soil and stone intake.

The proposed additional soil and stone (and broken rock) intake to the facility will comprise a mix of materials managed as both waste (as heretofore) and as non-waste (by-product).

This Appropriate Assessment has been prepared by SLR Consulting Ireland (SLR) on behalf of Kilsaran in support of its planning application to Kildare County Council (for the above referenced development at its Halverstown soil recovery facility. It is also intended to support a related waste licence review application to the Environmental Protection Agency (EPA) for an increase in the total permitted waste intake to the facility.

### **1.2 Brief Project Overview**

The project for which planning permission is being sought provides for a revised backfilling and restoration scheme at the former sand and gravel pit (and existing recovery facility) at Halverstown and is brought forward in view of the existing sustained high level of demand for soil recovery capacity in the Eastern region. The scheme will optimise soil intake and recovery capacity at the Halverstown facility.

The development is largely extant having been granted planning permission by Kildare County Council in December 2018 (Planning Ref. 18/453) and an EPA waste licence in July 2020 (Ref. W0300-01). Backfilling and recovery activities commenced at the application site in late 202 and have continued uninterrupted since that time.

In addition to the increase intake and continuation of the existing permission, the proposed development also provides for

- continued shared use of existing, co-located site facilities, structures and infrastructure (including the site office, staff welfare facilities, weighbridge (with dedicated office), wheelwash, hardstand areas, fuel storage tanks and site access road);
- (ii) continued separation of any construction and demolition waste (principally concrete, metal, timber, PVC pipework and plastic) inadvertently imported to the facility, prior to removal off-site to authorised waste disposal or recovery facilities;
- (iii) continued soil and stone intake at a rate of up to 300,000 tonnes per annum,
- (iv) continued use of a section of the existing concrete block curing shed as a waste inspection and quarantine facility;
- (v) continued environmental monitoring of noise, dust and groundwater for the duration of the site recovery and restoration activities and for a short period thereafter (and in accordance with EPA waste licence requirements);
- (vi) continued temporary stockpiling of topsoil pending its re-use as cover material for final restoration of the site; and



(vii) ultimate restoration of the modified final landform (entailing harrowing, topsoiling and seeding) to establish a native woodland habitat on the northern side of the access road and grassland habitat on the southern side.

### 1.3 Site Description

The existing backfilling / recovery facility is located in the townland of Halverstown Co. Kildare, approximately 4.5km south of Kilcullen village, just over 2km to the north-east of Calverstown village and approximately 700m west of the M9 motorway. The site is located at approximate ITM grid co-ordinates 682513 E 705519 N and is shown on an extract from the 1:50,000 scale Discovery Series map of the area in Figure 1.

The application site extends across an area of approximately 18.0 hectares (ha), within a wider landholding of 26.3 hectarea. It is bound to the north by L6083 local road, by the R448 Regional Road (the former N9 National Primary Road) to the east and by farmland with residential housing and agricultural buildings to the south and west. The application site is accessed via an existing junction and entrance leading off the R448 Regional Road.

The existing backfilling / recovery facility at the application site comprises lands originally developed as a sand and gravel pit (to the south of the access road through the site) and lands previously only ever used for agricultural use, principally grassland (in the north-eastern part of the application site). There is an existing concrete block plant (operated by the Applicant) located to the north-west of the application site and accessed by the road running through it.

The surrounding landscape is characterised by agricultural land with fields under a mixture of arable production and permanent pasture some of which are bounded by hedgerows. The M9 motorway running in a north-south direction dissects the landscape to the east of the former sand and gravel pit and forms a prominent landscape feature. The town of Kilcullen and the village of Calverstown are the largest urban areas with other small rural settlements and properties scattered along the roads and lanes throughout the local landscape.

### 1.4 Report Purpose

This report has been produced to provide a report, as required under Stage 1 and Stage 2 of the Appropriate Assessment process, and includes all relevant information to the Competent Authority (in this case Kildare County Council) in order for it to determine whether the proposed additional soil intake and continuation of backfilling / recovery activities at Halverstown is likely to have a significant effect on the integrity of any Natura 2000 site, or sites, within its zone of influence and whether there is a requirement for an Appropriate Assessment (Stage 2 Assessment) to be undertaken.

### 1.5 Relevant Legislation and Policy

The Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) forms the basis for the designation of Special Areas of Conservation (SAC). Similarly, Special Protection Areas (SPA) are classified under the Birds Directive (Council Directive 2009/147/EEC on the Conservation of Wild Birds). Collectively, SACs and SPAs are referred to as the Natura 2000 network. The Natura 2000 Network is the minimum required to conserve certain habitats and species which are listed in the Directives.

Under Article 6(3) of the Habitats Directive, an Appropriate Assessment (AA) must be undertaken for any plan or project that is not directly connected with or necessary to the management of a Natura 2000 site but is likely to have a significant effect thereon, either individually or in combination with other plans or projects. An AA is an evaluation of the potential impacts of a plan or project on the conservation objectives of a Natura 2000 site, and the identification, where necessary, of mitigation or avoidance measures to preclude adverse effects on the integrity of the site.



Article 6, paragraph 3 of the European Commission Habitats Directive 92/43/EEC ("the Habitats Directive") states that:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it with not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public".

### 1.5.1 European Communities (Birds and Natural Habitats) Regulations 2011

Pursuant to the Habitats Directive, Part 5 of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, similarly sets out the requirements for screening assessments and the circumstances under which an AA is required.

Regulation 42(1) requires that 'a screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.' Regulation 42(2) expands on this, stipulating that a public authority must carry out a screening for AA before consent for a plan or project is given, or a decision to undertake or adopt a plan or project is taken.

Regulation 42(6) requires that 'the public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site'.

Regulation 42(3)(a) gives the public authority the power to direct a third party to provide a Natura Impact Statement (NIS) and Regulation 42(3)(b) allows it to request any additional information that it needs to complete the screening assessment or AA. Regulation 42(5) goes on to make clear that the NIS should include such information as the public authority considers necessary to enable it to undertake the AA and to ascertain if a project or plan will affect the integrity of a Natura 2000 site. In addition to the information, Regulation 2(1) provides a definition of a Natura Impact Statement as 'a report comprising the scientific examination of a plan or project and the relevant European Site or European Sites, to identify and characterise any possible implications of the plan or project individually or in combination with other plans or projects in view of the conservation objectives of the site or sites, and any further information including, but not limited to, any plans, maps or drawings, scientific information or data required to enable the carrying out of an Appropriate Assessment'.

Regulation 42(11) makes clear that the AA must be carried out by the public authority and that it must include its conclusion as to whether the project or plan would adversely affect the integrity of a Natura 2000 site, and that this must be done prior to consenting the project.

### **1.5.2** Planning and Development Act 2000 (as amended)

These processes have been further enshrined in the Planning and Development Act 2000 (as amended), in Sections 177T, 177U and 177V, which are outlined below:

S177T(1)(b) - A Natura impact statement means a statement, for the purposes of Article 6 of the Habitats Directive, of the implications of a proposed development, on its own or in



combination with other plans or projects, for one or more than one European site, in view of the conservation objectives of the site or sites.

S177T(2) - Without prejudice to the generality of subsection (1), a Natura impact report or a Natura impact statement, as the case may be, shall include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for one or more than one European site in view of the conservation objectives of the site or sites.

S177U.(1) - A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

S177T(4) - The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is required if it cannot be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

S177V - (1) An appropriate assessment carried out under this Part shall include a determination by the competent authority under Article 6.3 of the Habitats Directive as to whether or not a draft Land use plan or proposed development would adversely affect the integrity of a European site and an appropriate assessment shall be carried out by the competent authority, in each case where it has made a determination under section 177U(4) that an appropriate assessment is required, before — ... (b) consent is given for the proposed development.

### **1.6** Statement of Authority

This report has been prepared by Brogan Costello (SLR Project Ecologist). Michael Bailey (SLR Associate Ecologist) carried out the technical review of this report.

Brogan holds a BSc. in (Botany) from the National University of Galway and an MSc. in Global Change, Ecosystem Science and Policy from the University College Dublin. She joined SLR having previously completed traineeships with the European Commission and Galway County Council. She is a qualifying member of CIEEM.

Michael Bailey holds a BSc. in Biology and Ecology from the University of Ulster and an MSc. in Quantitative Conservation Biology from the University of the Witwatersrand in Johannesburg. He has extensive experience in ecological studies and assessments across a range of sectors in Ireland and of agricultural, mining and renewable energy projects across Africa. He is a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM).

## 2.0 METHODOLOGY

### 2.1 General Approach



The methodology used in this report is based on, and in accordance with, guidance provided by the National Parks and Wildlife Service (NPWS, 2010), the Office of the Planning Regulator (OPR, 2021) and EC Guidance (EC, 2018), (EC, 2020), (EC, 2021) on the application of Article 6 of the Habitats Directive.

The 2021 EC guidance describes a series of stages and steps which should be completed when carrying out the assessment and these are followed here with the addition of sub-headings for further clarity. The assessment applies only to European sites. More specifically, it only applies to the qualifying interest features of such sites i.e., the features which are the reason that the site was designated.

### 2.2 Baseline Information

### 2.2.1 Ecological Desk Study

An ecological desk study comprising an online search for (i) SACs and SPAs within 15km of the project site; (ii) Annex I habitats and Annex II species (of the Habitats Directive) within 10km of the Project site; and (iii) Annex I bird species (of the Birds Directive) within 15km of the Project site. The desk study area was extended where possible links to Natura 2000 sites and species populations occurred due to emissions to air and water, changes to hydrology, or mobile or migratory species populations by utilising the Source-Pathway-Receptor model.

Online resources included ecology data held by the National Biodiversity Data Centre, the National Parks and Wildlife Service, the Environmental Protection Agency, the Ireland Wetland Bird Survey (IWeBS) and Ordnance Survey Ireland (Geohive).

### 2.2.2 Field Survey

An ecological field survey was conducted on 8 September 2023 by SLR ecologist Jake Matthews. This included a habitat survey of the site and the surrounding **100m** to identify and map any habitats listed on Annex I of the Habitats Directive, habitats which have a supporting function for such habitats, habitats which may support Annex II species of the Habitats Directive and habitats which may support Annex I species of the Birds Directive. The habitats were classified using 'A Guide to Habitats in Ireland' <sup>1</sup>

### 2.3 Stage One: AA Screening

The methodology for the screening assessment follows that set out in EC (and other) guidelines and be based on the data, surveys and assessments described in Section 0. In summary this will comprise:

**Step 1**: ascertaining whether the Project is directly connected with or necessary to the management of a Natura 2000 site. Typically, this applies only to a management plan, or parts thereof, which has the purpose of maintaining or restoring the conservation interest of a European site, and which would not have a negative effect on any other European site.

**Step 2:** identifying the relevant elements of the Project and their likely impacts, which is subdivided into:

Step 2, Part 1: an outline description of the Project, including construction, operation and decommissioning, containing enough information for potential impact pathways to be understood,



<sup>&</sup>lt;sup>1</sup> <u>A Guide to Habitats in Ireland - Fossitt.pdf (npws.ie)</u> (Accessed September 2023)

and the Project site and its surroundings, focussing on the habitats and species that may form part of the qualifying interest of a European site.

Step 2, Part 2: an identification of the aspects of the project which have the potential to affect European sites, either alone or in combination with other Projects and Plans. This may include for example emissions to air and water, noise and increases in recreational activities.

**Step 3:** identifying which (if any) European sites may be affected, considering the potential effects of the Project alone or in combination with other plans or projects, which is subdivided into:

Step 3, Part 1: generating an initial list of European sites to be considered in the screening process, which are those which are potentially connected (via a Pathway) to the Project site including (i) any which overlap with the Project site or are close enough to experience increased noise, vibration, light, visible human activity or invasive species; (ii) those that may have downstream connectivity via watercourses or groundwater to the Project site or transport routes; (iii) those that may receive deposition of pollutants as a result of emissions to air from the Project or transport routes; (iv) those which may support migratory or mobile species populations which may also use the Project site or its environs; and (v) those which may receive additional recreational activity once the Project site is inhabited.

Step 3, Part 2: compiling basic information on the European sites identified in Part 1, including a list of qualifying interest features / special conservation interest (the Receptors), their conservation objective if known (maintain or restore), the distance and direction from the Project site (including transport routes) and how it is or is not connected, using the Source-Pathway-Receptor model, to the Project site (including transport routes). Likely significant effects can be immediately excluded for any European sites and any qualifying /special conservation interest features which clearly lack a pathway or were it can be demonstrated there is a very weak pathway, such that any effects would not be appreciable.

**Step 4:** assessing whether likely significant effects (LSE) on all European sites can be ruled out, in view of their conservation objectives.

Step 4, Part 1: assessing LSE for the project alone, determining whether there is a risk that the project could undermine the conservation objectives for the qualifying interest features / special conservation interest for those European sites for which a pathway has been identified. This is a scientific determination which considers whether the maintain or restore objective applies and both direct and indirect effects. If there is any uncertainty or detailed investigation or mitigation are required, LSE are assumed.

Step 4, Part 2: assessing LSE for the project in combination with other Projects and Plans. Along the same lines as Part 1, this considers whether the effects of the Project, if not capable of undermining the conservation objectives on their own, could do so cumulatively with other projects and plans. It also considers whether the risk of undermining conservation objective is elevated when cumulative effects are considered.

**Conclusion:** stating whether likely significant effects arising from the Project, alone and incombination with projects and plans, on European sites can be excluded, and if they cannot, which European sites and which qualifying interest features / special conservation interest are at risk from significant effects, and the relevant impact sources and pathways. If the latter, an AA will be required. The conclusion will not consider any mitigation measures designed to avoid likely significant effects on a European site.

### 2.4 Sources of Information

### 2.4.1 For the Project Alone

Sources of information for the assessment of the Project 'alone' include:



- Article 17 and Article 12 reports completed by the National Parks and Wildlife Service.<sup>2</sup>
- Site Synopses, Conservation Objectives and Standard Data Forms for he Natura 2000 sites.3

sites.<sup>3</sup>
Environmental Protection Agency (EPA) Maps. <sup>4</sup>
2.4.2 For the Project in Combination
Sources of information for the plans and projects for the 'in-combination' assessment were as above and also include:

- Kildare Development Plan 2023-2029<sup>5</sup>.
- Myplan.ie<sup>6</sup> was accessed for information on other projects and plans.



<sup>&</sup>lt;sup>2</sup> Article 17 Reports | National Parks & Wildlife Service (npws.ie) (Last accessed September 2023)

<sup>&</sup>lt;sup>3</sup> Protected Sites in Ireland | National Parks & Wildlife Service (npws.ie) (Last accessed September 2023)

<sup>&</sup>lt;sup>4</sup> EPA Maps (Last accessed September 2023)

<sup>&</sup>lt;sup>5</sup> Volume 1 Chapters 1 - 17 - Kildare County Council (kildarecoco.ie) (Last accessed September 2023)

<sup>&</sup>lt;sup>6</sup> Home - My Plan (Last accessed September 2023)

management of any European Site.

### 3.0 STAGE ONE : SCREENING

### 3.1 Step One: Management of Natura 2000 Sites



### 3.2 Step Two, Part 1: Project Description

The proposed amended development scheme at the facility provides for:

- an increase in the permitted total intake of soil and rock waste to the existing licensed recovery facility, from 1.2 million tonnes to 2.06 million tonnes. The additional intake to the facility will comprise a mix of soil and stone managed as waste (as heretofore) and as (non-waste) by-product;
- an extension to the permitted life of the existing facility of 3 years (to December 2029) in order to accommodate the additional soil and stone intake;
- continued shared use of existing, co-located site facilities, structures and infrastructure (including the site office, staff welfare facilities, weighbridge (with dedicated office), wheelwash, hardstand areas, fuel storage tanks and site access road);
- continued soil and stone intake at a rate of up to 300,000 tonnes per annum, of which no more than 95,000 tonnes (per annum) will be managed as waste;
- continued separation of any construction and demolition waste (principally concrete, metal, timber, PVC pipework and plastic) inadvertently imported to the facility, prior to removal off-site to authorised waste disposal or recovery facilities;
- continued use of a section of the existing concrete block curing shed as a waste inspection and quarantine facility;
- continued environmental monitoring of noise, dust and groundwater for the duration of the site recovery and restoration activities and for a short period thereafter (and in accordance with EPA waste licence requirements);
- continued temporary stockpiling of topsoil pending its re-use as cover material for final restoration of the site: and
- ultimate restoration of the modified final landform (entailing harrowing, topsoiling and seeding) to establish a native woodland habitat on the northern side of the access road and grassland habitat on the southern side.

The additional capacity provided by this further development at Halverstown is achieved by

- increasing the overall height of backfilling by 1m on the southern side of the access road and steepening of side slopes to approximately 1v:6h (9.5°);
- creating a 3m high, 20m wide screening berm along the northern side of the access road and steepening side slopes to the site boundary to 1v:4v (14°) (which will provide screening and noise attenuation of traffic movements along the access road leading to the concrete manufacturing plant); and
- allowing for the fact that the density of imported soil placed in-situ is approximately 20% greater than was assumed at the time the planning application was submitted. Site records indicate the soil density achieved in-situ is 1.8t/m<sup>3</sup> as against 1.5t/m<sup>3</sup> (which was initially assumed at the outset) and as a result, there is a shortfall of approximately 240,000 tonnes in the soil intake required to complete the currently approved landform.



As indicated above, the increase in the total quantity of soil intake

- will not give rise to any increase in the rate of soil importation to the existing licenced recovery facility - the maximum intake rate will remain at 300,000 tonnes / year (in line with the current development permitted by Planning Ref. 18/453);
- will not require any new or replacement site infrastructure, as all existing facilities (permitted by Planning Ref. 18/453) will remain in service.

As at the present time, imported materials will continue to comprise uncontaminated, naturally occurring materials, principally excess soil, stone and/or broken rock generated by construction and development activity in the surrounding region (managed either as waste or as (non-waste) by-product). No peat, contaminated soils or non-hazardous waste will be accepted at the recovery facility.

The importation, placement and use / recovery of the additional soil intake will provide for an increase in the total capacity available at the existing facility, facilitate construction of the modified backfilled landform at the former pit and its restoration to native woodland and grassland habitat.

### 3.2.1 Surface Water and Groundwater Management

In general, all rain which falls across the application site at the present time infiltrates into the backfilled materials or the naturally permeable ground which lies beneath the application site and surrounding area, and ultimately recharges the underlying groundwater table.

There are also no surface watercourses or surface water bodies within the site (or in the immediate vicinity thereof) and no surface water discharge off-site.

In the course of backfilling and recovery operations at Halverstown, the upper surface of the backfilled soil is graded so as to ensure that any surface water run-off which may arise falls to minor sumps (or closed depressions) at localised low points, either within the backfilled materials, against the former pit sidewalls or on the former pit floor.

Experience in operating the recovery facility to date is that the volumes of any run-off (in the form of overground rills or minor gullies) is relatively small and that any localised ponding which does arise at low points or minor temporary sumps across the site infiltrates to ground within a short time period.

### 3.2.2 Site Drainage

Groundwater recharge is largely diffuse and there is no concentrated or point recharge of rainwater run-off to the underlying groundwater table. As a consequence, to date there has been no requirement for a surface water management plan at the existing facility. It is expected that this will continue to be the case if the intake capacity is further increased, and the operational life of the facility is extended as proposed.

Notwithstanding this, and to ensure that there will be no long-term impact associated with surface water run-off from backfilled areas once on-site activities have ceased and restoration works have been completed, perimeter drainage channels will be installed around the backfilled areas to

- (i) capture any overground run-off which may arise following extended or intense rainfall events;
- (ii) effectively act as swales and facilitate infiltration and recharge to ground through their base and sides (particularly where they are in contact with any more permeable in-situ sand and gravel deposits); and
- (iii) channel any excess run-off to collect at ephemeral ponds / closed depressions developed at low points at the end of the channel run, whereon it will infiltrate slowly to ground.



### 3.3 Step Two, Part 2: Potential Impact Factors



The Project has the potential to result in the following impacts:

- Loss of habitats within the Site boundary which may be part of and/or support the Qualifying Interests (QIs) or Species of Conservation Interest (SCIs) of Natura 2000 sites;
- Polluted discharge to water bodies which may reduce groundwater quality and negatively affect the QIs or SCIs of Natura 2000 sites near or downstream of the project site;
- Emissions to air (dust) resulting from the soil backfilling and recovery operations which could lead the smothering of vegetation and restricting growth and reduce potential foraging sources for some of the QIs or SCIs of Natura 2000 sites; and/or
- Noise generated by site activities / operations which could lead the disturbance of the Qualifying Interests (QIs) or Species of Conservation Interest (SCIs) of Natura 2000 sites;

The habitats and species listed as features of interest of any Natura 2000 sites within the zone of influence of the project must therefore be assessed for effects from habitat loss, polluted discharge, dust and noise.

### 3.4 Step Three: Identification of Natura 2000 Sites

The first step in identification of relevant Natura 2000 sites for further assessment is to identify those that will be at risk from likely significant effects where a Source-Pathway-Receptor (S-P-R) links exists between the proposed development and the Natura 2000 site.

The relevant Natura 2000 sites are identified through a review of the nature and scale of the project, the project location relative to Natura 2000 sites, presence of ecological (including mobile and migratory species) and landscape connectivity, such as along waterways, hedgerows and treelines between the project site and the Natura 2000 sites, known impacts and effects likely to arise as a result of the project and the qualifying interests of the Natura 2000 sites.

Table 3-1 provides a list of the Natura 2000 sites which were identified as having potential Source-Pathway-Receptor links which will be assessed as part of the screening process.

Natura 2000 Site	Site Code	Distance from Project Site
River Barrow and River Nore SAC	002162	9.2km west
Pollardstown Fen SAC	000396	9.7km north-east
Slaney River Valley SAC	000781	12.0km south southeast
Poulaphouca Reservoir SPA	004063	12.4 km east
Mouds Bog SAC	002331	12.5km north-east
Wicklow Mountains SAC	002122	14.6km south-east

 Table 3-1

 Natura 2000 Sites with Potential Source-Pathway-Receptor Links

Table 3.2 overleaf provides a description of each site and lists their conservation objects and any Source-Pathway-Receptor link.



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# / Extension Permission SLR Ref No: 501.065158.00001 March 2024 March 2024 Table 3-2 Table 3-2 European Sites Initially considered for Source – Pathway – Receptor Links

Natura 2000 Site and Code	Qualifying Interest and Conservation Objectives	Distance from Project <sup>7</sup>	Connections (Source-Pathway-Receptor)	Considered further in screening Y/N
River Barrow and River Nore SAC [002162]	<ul> <li>Estuaries [1130]</li> <li>Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>Reefs [1170]</li> <li>Salicornia and other annuals colonising mud and sand [1310]</li> <li>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</li> <li>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</li> <li>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260]</li> <li>European dry heaths [4030]</li> <li>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</li> <li>Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]</li> <li>Old sessile oak woods with llex and Blechnum in the British Isles [91A0]</li> <li>Alluvial forests with Alnus glutinosa and Fraxinus excelsior (<i>Alno-Padion, Alnion incanae, Salicion albae</i>) [91E0]</li> </ul>	9.2km	<ul> <li>Loss of habitat: The Site does not overlap with the European site. Therefore, there is no potential for direct habitat loss within the Natura 200 site and there will be no loss of supporting Annex 1 habitat outside of the European site.</li> <li>Water quality discharge: The QIs for which River Barrow and River Nore SAC are designated which are closest to the Site are White clawed crayfish and Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae</i>) (as mapped by NPWS<sup>8</sup>).</li> <li>As per the conservation objectives of this Site the water quality of areas where White-clawed crayfish are present must have a Q-value of at least Q3-4. The Site and River Barrow and River Nore SAC are both within the Barrow Catchment, and are linked by the local groundwater aquifers, therefore, this must be considered further for potential impacts from pollution on the Site reaching the local groundwater.</li> <li>Emissions to air (dust and noise): As this SAC is 9.2km from the Site it is suitably distant from the source of dust and noise, for example, there will be no impact from dust as fugitive dust is typically deposited within 100 to 200 m of the source.</li> </ul>	POL *

<sup>&</sup>lt;sup>7</sup> When measured in a straight line.

<sup>&</sup>lt;sup>8</sup> Site\_specific\_cons\_obj (npws.ie)

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Natura 2000 Site and Code	Qualifying Interest and Conservation Objectives	Distance from Project <sup>7</sup>	Connections (Source-Pathway-Receptor)	Considered further in screening Y/N
	<ul> <li>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</li> <li>Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]</li> <li>Austropotamobius pallipes (White-clawed Crayfish) [1092]</li> <li>Petromyzon marinus (Sea Lamprey) [1095]</li> <li>Lampetra planeri (Brook Lamprey) [1096]</li> <li>Lampetra fluviatilis (River Lamprey) [1099]</li> <li>Alosa fallax fallax (Twaite Shad) [1103]</li> <li>Salmo salar (Salmon) [1106]</li> <li>Lutra lutra (Otter) [1355]</li> <li>Trichomanes speciosum (Killarney Fern) [1421]</li> <li>Margaritifera durrovensis (Nore Pearl Mussel) [1990]</li> </ul>			A JONE
Pollardstown Fen SAC	<ul> <li>Calcareous fens with <i>Cladium</i> mariscus and species of the <i>Caricion</i> davallianae [7210]</li> <li>Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]</li> <li>Alkaline fens [7230]</li> <li><i>Vertigo geyeri</i> (Geyer's Whorl Snail) [1013]</li> <li><i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014]</li> </ul>	9.7km	<ul> <li>Loss of habitat: The Site does not overlap with the European site. Therefore, there is no potential for direct habitat loss within the Natura 200 site and there will be no loss of supporting Annex 1 habitat outside of the European site. Site is not within the 1km grid for Geyer's Whorl Snail, Desmoulin's Whorl Snail and Narrow-mouth Whorl Snail, as mapped by NPWS. This Natura 2000 site is also a significant distance from the Site, ca. 9.7km, which is well outside of the 1km grid which the species have been recoded within.</li> <li>Water quality discharge: The conservation objectives of calcareous fens, petrifying springs with tufa formation and alkaline fens are to maintain / restore soil pH and water quality within the SAC. However, as the SAC is in a different groundwater body from the Site it will not be affected by any changes in groundwater quality and does not need to be considered further for potential impacts from groundwater pollution from the Site.</li> </ul>	Ν

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Appropriate Assessment : Screening and NIS			March 2024			
Natura 2000 Site and Code	Qualifying Interest and Conservation Objectives	Distance from Project <sup>7</sup>	Connections (Source-Pathway-Receptor)	Considered further in screening Y/N		
	<ul> <li>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</li> </ul>		<b>Emissions to air (dust and noise):</b> As this SAC is 9.7km from the Site it is suitably distant from the source of dust and noise, for example, there will be no impact from dust as fugitive dust is typically deposited within 100 to 200 m of the source.	3		
Slaney River Valley SAC	<ul> <li>Estuaries [1130]</li> <li>Mudflats and sandflats not covered by seawater at low tide [1140]</li> </ul>	12.0km	<b>Loss of habitat:</b> The Site does not overlap with the European site. Therefore, there is no potential for direct habitat loss within the SAC and there will be no loss of supporting Annex 1 habitat outside of the European site.	N N N		
	<ul> <li>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</li> <li>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</li> </ul>		Water quality discharge: The QIs for which Slaney River Valley SAC are designated are aquatic, and as there is no hydrological connection as the Site and this Natura Site are within different groundwater bodies and does not need to be considered further for potential impacts from groundwater pollution from			
• Wa lev and [32	<ul> <li>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260]</li> </ul>		Emissions to air (dust and noise): As this SAC is 12.0km from the Site it is suitably distant from the source of dust and noise, for example, there will be no impact from dust as fugitive dust is typically deposited within 100 to 200 m of the source.			
	<ul> <li>Old sessile oak woods with llex and Blechnum in the British Isles [91A0]</li> </ul>					
	<ul> <li>Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</li> </ul>					
	<ul> <li>Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]</li> </ul>					
	<ul> <li>Petromyzon marinus (Sea Lamprey) [1095]</li> </ul>					
	<ul> <li>Lampetra planeri (Brook Lamprey) [1096]</li> </ul>					
	<ul> <li>Lampetra fluviatilis (River Lamprey) [1099]</li> </ul>					
	• Alosa fallax fallax (Twaite Shad) [1103]					
	Salmo salar (Salmon) [1106]					
	Lutra lutra (Otter) [1355]					
	<ul> <li>Phoca vitulina (Harbour Seal) [1365]</li> </ul>					

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<sup>&</sup>lt;sup>9</sup> <u>Assessing connectivity with special protection areas.pdf (nature.scot)</u>

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Appropriate Assessment : Screening and NIS			March 2024	
Natura 2000 Site and Code	Qualifying Interest and Conservation Objectives	Distance from Project <sup>7</sup>	Connections (Source-Pathway-Receptor)	Considered further in screening Y/N
Wicklow Mountains SAC	<ul> <li>Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110]</li> <li>Natural dystrophic lakes and ponds [3160]</li> <li>Northern Atlantic wet heaths with Erica tetralix [4010]</li> <li>European dry heaths [4030]</li> <li>Alpine and Boreal heaths [4060]</li> <li>Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130]</li> <li>Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]</li> <li>Blanket bogs (* if active bog) [7130]</li> <li>Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110]</li> <li>Calcareous rocky slopes with chasmophytic vegetation [8220]</li> <li>Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]</li> <li><i>Lutra lutra</i> (Otter) [1355]</li> </ul>	14.6km	Loss of habitat: The Site does not overlap with the European site. Therefore, there is no potential for direct habitat loss within the Natura 200 site and there will be no loss of supporting Annex 1 habitat outside of the European site. Water quality discharge: There is no hydrological link between the Site and this SAC as it sits at a higher elevation than the Site. Therefore there are no likely significant effects from changes in water quality. Emissions to air (dust and noise): As this SAC is 14.6km from the Site it is suitably distant from the source of dust and noise, for example, there will be no impact from dust as fugitive dust is typically deposited within 100 to 200 m of the source.	N
	( ) L 1			

### 3.5 Step Four – Part 1: Likely Significant Effects for Project 'Alone'

There are two Natura 2000 site subject to potential likely significant effects (LSEs) arising from the project:

- River Barrow and River Nore SAC [002162]
- Poulaphouca Reservoir SPA [004063]

The pathways for the project alone have been identified as the potential for impacts from loss of habitat and groundwater pollution on these Natura 2000 sites. Therefore, likely significant effects on these Natura 2000 sites will be carried forward to Stage 2 Assessment as the Project may undermine the conservation objectives for QIs and SCIs of this Natura 2000 sites.

### 3.6 Step Four – Part 2: Likely Significant Effects 'In Combination'

Cumulative effects can result from individually insignificant but collectively significant actions taking place over a period of time or concentrated in a location. Cumulative effects can occur where a proposed development results in individually insignificant impacts that, when considered incombination with impacts of other proposed or permitted plans and projects, can result in significant effects (CIEEM, 2018).

In combination effects were assessed by conducting a search of the county development plans and on-line planning forums for plans and projects in each of the counties in which the impacted Natura 2000 sites identified are located.

The Kildare County Development Plan (2023–2029) and the on-line planning portal for this county were referenced to determine if there are any plans or projects which are likely to result in any effects on this Natura 2000 site.

Planning applications to Kildare County Council within last 5 years which may also affect the relevant screened-in Natura 2000 sites mainly consist of domestic property developments and modifications such as extensions. These applications are mostly small-scale and will not result in in-combination effects with the proposed continuation of backfilling / recovery activities.

### 3.7 Consideration of Screening

This screening report for Appropriate Assessment, based on the best available scientific information, shows that the Project at Halverstown, Kilcullen, Co. Kildare, in the absence of the implementation of suitable mitigation, could pose a risk of likely significant effects on River Barrow and River Nore SAC and Poulaphouca Reservoir SPA.

It is therefore considered that the project requires progression to the second stage of Appropriate Assessment. This can be found in the next section of this document.

## 4.0 STAGE 2 : NATURA IMPACT STATEMENT

This Natura Impact Statement (NIS) was prepared as part of a planning application by Kilsaran Concrete Unlimited Company to Kildare County Council in respect of the proposed. Project at Halverstown, Kilcullen, Co. Kildare.

This NIS presents information on the project and on the Natura 2000 sites for which likely significant effects (LSEs) have been identified, in order for the competent authority, in this case Kildare County Council, to carry out a Stage 2 Appropriate Assessment. The purpose of the Stage 2 AA is to determine whether the project would lead to any adverse effects on the integrity of River Barrow and River Nore SAC or Poulaphouca Reservoir SPA. The integrity of a Natura 2000 site can be defined as 'the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and / or populations of species for which the site is or will be classified'.

The headings within the appropriate assessment report template provided in the European Commission guidance document on the assessment of plans and projects significantly affecting Natura 2000 sites (EC, 2021) have been used to provide a framework to examine the potential impacts of the project. This section of the report sets out the potential implications of the plan or project (both alone or in combination with other projects or plans) on the integrity of the Natura 2000 site with respect to the conservation objectives of the site and to its structure and function.

The precautionary principle should be applied when considering the potential implications and the focus should be on demonstrating, with supporting evidence, that there will be no adverse effects on the integrity of River Barrow and River Nore SAC, or Poulaphouca Reservoir SPA. Where this is not the case, adverse effects must be assumed.

### 4.1 Step 1: Collect Information on Project and Natura 2000 Sites

A detailed project description is provided in Section 3.2 above which provides details on the construction and operational phases of the project and some details on the site drainage and surface water management.

A description of each of the Natura 2000 sites screened in is provided in Table 3-2 above and the conservation objectives for each site are summarised below.

### **River Barrow and River Nore SAC**

The conservation objectives (COs) for River Barrow and River Nore SAC are as follows:

To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:

These Annex I habitats and Annex II species are:

- Estuaries [1130]
- Mudflats and sandflats not covered by seawater at low tide [1140]
- Reefs [1170]
- Salicornia and other annuals colonising mud and sand [1310]
- Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]
- Mediterranean salt meadows (Juncetalia maritimi) [1410]
- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]
- European dry heaths [4030]
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]
- Petrifying springs with tufa formation (Cratoneurion) [7220]



- Old sessile oak woods with llex and Blechnum in the British Isles [9140]
- Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion Alnion incanae, I. COBO COLOR Salicion albae) [91E0]
- Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]
- Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] .
- Austropotamobius pallipes (White-clawed Crayfish) [1092]
- Petromyzon marinus (Sea Lamprey) [1095]
- Lampetra planeri (Brook Lamprey) [1096]
- Lampetra fluviatilis (River Lamprey) [1099]
- Alosa fallax fallax (Twaite Shad) [1103]
- Salmo salar (Salmon) [1106]
- Lutra lutra (Otter) [1355]
- Trichomanes speciosum (Killarney Fern) [1421]
- Margaritifera durrovensis (Nore Pearl Mussel) [1990]

### **Poulaphouca Reservoir SPA**

The conservation objectives (COs) for Poulaphouca Reservoir SPA are as follows:

To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

- Greylag Goose (Anser anser)
- Lesser Black-headed Gull (Larus fuscus)

The conservation objectives (COs) are available in the NPWS (2022) document Conservation Objectives Series for Poulaphouca Reservoir SPA [004063].

There are no specific conservation objectives (COs) set for the Species of Conservation Interest (SCIs) of this SPA, but as for other similar SPAs which do have specific COs there is usually a link between habitat loss and disturbance (e.g. noise) impacts on populations of birds.

### 4.2 Step 2: Assess Implications in view of Conservation Objectives

The Appropriate Assessment Screening process showed that the elements of the project alone identified as having potential for LSEs on River Barrow and River Nore SAC and Poulaphouca Reservoir SPA are as follows:

- Potential impacts on groundwater quality from suspended soils and the accidental spillage and/or leak of fuels and oils during construction and operational phases of the project.
- Loss of habitat potentially used by SCI bird species of Poulaphouca Reservoir SPA which may also be susceptible to dust and noise.

Likely significant effects from other plans and projects were screened out during the Stage 1 assessment, see Section 3.6 above.

### 4.3 Step 3: Ascertain Effects on Integrity of Natura 2000 Sites

#### 4.3.1 Habitat Loss

The conservation objectives for Poulaphouca Reservoir SPA are not specific. There is possibility that Greylag geese found within this SPA could utilise agricultural land near the Site and loss of this land could remove feeding habitats which could impact population numbers within the SPA itself.



The Icelandic population of Greylag Geese winters in Scotland and Ireland, occurring mostly at coastal sites. Greylag Geese used to concentrate more on estuaries, where the yied on the roots of rushes and sedges. Greylag Geese also feed on cereal stubble and grassland in their wintering areas. The area of grassland which could be impacted by noise and dust from ongoing) continued activity at the project site does not represent the type of grass and grazing areas likely to be used by Greylag Geese and it is a long way from the coastal and estuarine habitats that the geese are most likely found in.

### 4.3.2 Pollution to Groundwater

The recorded groundwater levels at the Site indicate that groundwater flows to the west and south beneath the Site via the Calverstown aquifer. Therefore it is likely that groundwater in the aquifer is in continuity with surface waters in the Kildoon Stream which flows west into the River Barrow and any significant pollution of the local groundwater from the construction or operational works at the Site has the potential to affect the aquatic habitat quality within the River Barrow and River Nore SAC and in turn impact the conservation objectives this Natura 2000 site.

### 4.3.3 Dust and Noise

Construction and operational phase works have the potential to raise dust and noise which could affect vegetation and cause disturbance to nearby wildlife.

### 4.4 Step 4: Mitigation Measures

### 4.4.1 Habitat Loss

The project provides for an increase in the intake of soil and stone (and broken rock) at an existing soil recovery facility and will have no impact on grassland areas that are favoured by Greylag geese. As the Site is a long way from the coastal and estuarine habitats that the geese are most likely found in, these birds will not be affected by the proposed development and no replacement habitat is required.

### 4.4.2 Water Quality

All of the site infrastructure required to service the proposed additional intake and continuation of ongoing activities at the existing development at Halverstown is already in place. As such there is no construction or development phase associated with the proposed development and no requirement to consider construction stage impacts separately.

The proposed development will be carried out in a phased approach and no distinction has been made between construction stage and operational stage. During the operational stage, potential impacts have been identified on groundwater quality from suspended solids and the accidental spillage and/or leak of fuels and oils.

The following mitigation measures are (and will continue to be) implemented at the site over its operational life:

- fuel storage will continue at the existing storage facility. There is no fuel storage within the backfilling and restoration areas;
- plant / machinery refuelling will take place at the designated paved refuelling area. No refuelling will take place within the backfill / recovery area;
- plant / machinery maintenance and repairs will take place on the hardstand area at the refuelling point. No servicing or maintenance of mobile plant and machinery will be undertaken within the backfill / recovery areas;
- all plant will be regularly maintained and inspected daily for leaks of fuels, lubricating oil or other contaminating liquids;
- all petroleum-based products (lubricating oils, waste oils, etc.) are stored on drip trays under cover in the workshop to prevent pollution due to accidental spills and leakages;



- a spill kit and drip trays will be kept on site and will be deployed if there is an accidental spillage from plant / machinery;
- plant operators will be briefed during 'toolbox' talks and site induction on where the spill kit is kept and how and when it is deployed;
- operating procedures at the facility require all soil and stones forwarded for backfilling and/or recovery purposes to be pre-sorted at source, uncontaminated and largely free of construction or demolition (C&D) waste or any non-hazardous / hazardous domestic commercial or industrial wastes.
- any materials that are deemed unacceptable for backfilling and/or recovery at the facility on the basis of a visual inspection at the weighbridge are immediately rejected and directed to an appropriately authorised waste facility.
- all soil and stone waste imported to the facility is unloaded (end-tipped) from trucks at active filling areas. It is visually inspected by site personnel at that point to ensure that there is no intermixed construction or demolition (C&D), non-hazardous or hazardous waste within it. Any consignments forwarded to site which are found to have excessive quantities of these materials intermixed within them are immediately rejected, reloaded onto HGVs and directed to leave site.
- any minor inclusions of non-inert construction and demolition waste (principally metal, timber, PVC pipes and plastic) inadvertently imported to the site are separated out and temporarily stored in skips at the waste quarantine area prior to being transferred off-site to appropriately authorised waste disposal or recovery facilities.
- any imported soil which is accepted at the facility but subsequently suspected / found to be non-compliant with acceptance criteria for the facility will be re-loaded onto HGV trucks and transferred to the existing waste inspection and quarantine facility for closer examination and/or testing;
- the waste inspection facility comprises a covered shed over a sealed concrete slab and incident rainfall will not therefore come into contact with any consignments of suspected contaminated waste stored at this location;
- should any subsequent inspection or testing of suspect soil waste at the inspection and quarantine facility identify any non-inert material which cannot be accepted or reused in the backfilling or restoration of this site, it will be quarantined pending removal off site by permitted waste collectors to an authorised waste disposal or recovery facility;
- any surface water run-off which may arise will generally infiltrate to ground through backfilled soils or local sumps / depressions in the backfilled ground surface;
- during extended or intense rainfall events, run-off will be directed to channels / swales where it will either infiltrate to ground through the underlying sand and gravel or flow to ephemeral ponds / closed depressions developed at low points at the end of the channel run, whereon it will infiltrate slowly to ground.

In order to preserve soils and prevent their erosion the following measures will be implemented:

- soil material imported and placed at the facility or held in stockpiles will be graded at angles shallower that the natural angle of repose (meaning they will be stable) and will be bladed off; and
- stockpiles will be re-vegetated where they are in place for a sufficient length of time to justify such a measure.

### 4.4.3 Noise

Noise levels attributable to the ongoing operation of the soil recovery facility (which will remain comparable with the proposed development when in operation) do not exceed those set out in the



current waste licence or in the EPA's *Guidance Note for Noise In Relation to Scheduled Activities* which states that "*the noise level at sensitive locations should be kept below an L(AR, T) value of 55 dB(A) by daytime*" when measured at the nearest noise sensitive location or site boundary.

In addition, any SCI birds that may use foraging grounds near the existing soil recovery facility will be habitualised to the noise and the future operations will not increase the noise levels.

Notwithstanding the findings of the noise impact assessment presented in Chapter 10 Noise, which determined that the continued backfilling and recovery activities at Halverstown will have negligible noise impact, and in line with practice at other Kilsaran facilities, the following measures will continue to be implemented wherever practicable to minimise the potential noise impact of on-site recovery activities:

### Phasing

• site operations will be carried out on a phased basis, with a view to completing the backfilling works and construction of proposed long-term screening berm on the northern side of the access road at the earliest opportunity. This will provide additional screening of noise to receptors on the northern and eastern side of the application site.

### Screening

• existing pit faces, stockpiled materials, berms and screen planting around the existing facility will be retained to act as acoustic barriers. Berms and landscaping should be inspected on a regular basis and maintained as necessary.

### Plant

- all mobile plant used at the development will have noise emission levels that comply with the limiting levels defined in EC Directive 2000/14/EC and any subsequent amendments thereof;
- all plant items properly maintained and operated in accordance with manufacturers' recommendations, in such a manner as to avoid causing excessive noise (i.e. all moving parts are kept well lubricated, all cutting edges are kept sharpened, the integrity of silencers and acoustic hoods are maintained).
- all plant will be fitted with effective exhaust silencers which are maintained in good working order to meet manufacturers' noise rating levels. Any defective silencers will be replaced immediately.

### Traffic

- all deliveries will be programmed to arrive during working hours only;
- care taken when unloading vehicles to reduce or minimise potential disturbance to local residents;
- access / internal haul roads are kept clean and maintained in a good state of repair, i.e. any potholes are filled and large bumps removed, to avoid unwanted rattle and "body-slap" from heavy goods vehicles;
- delivery vehicles waiting within the facility are prohibited from leaving their engines running and there should be no unnecessary revving of engines.

### 4.4.4 Dust

Any dust arising from construction or operational works will not cause LSE on any Natura 2000 site as the greatest amount of dust will be deposited within the first 100m from the Site; as stated by the Institute on Air Quality Management:

"A study by the Institute of Air Quality Management (IAQM, 2016) has indicated that fugitive dust is typically deposited within 100m to 200 m of the source, the greatest proportion of which, comprising larger particles (greater than 30 microns) is deposited within 100 m." (IAQM, 2016).



However, in dry, windy weather conditions, the backfilling and recovery activities may give rise to dust blows across, and possibly beyond the recovery facility / application site. Up order to control dust emissions, the following measures are implemented on site:

- water is sprayed from a tractor drawn bowser on any dry exposed surfaces (roads, hardstand and backfill areas) to suppress dust emissions;
- dust blows are partially screened on some sides by the existing pit side walls as backfilling progresses upwards;
- as the level of the filled materials approaches final surface levels, the site will be seeded with grass on a phased basis, as soon as practicable after placement of cover soils (topsoil). This will help to minimise soil erosion and potential dust emissions;
- the area of bare or exposed soils will, insofar as practicable, be kept to a minimum. If
  excessive dust emissions arise, consideration will be given to establishing temporary
  vegetation cover over exposed soil surfaces and/or stockpiles pending subsequent filling
  and restoration to proposed final ground level;
- stockpiling of imported soil materials is minimized. Ideally, soil is placed and compacted insitu immediately after being imported to site and end tipped. If temporary stockpiling of soil is required, it will be placed as far as practicable from nearby residences / sensitive receptors:
- all HGV's exiting the site are routed through the existing wheelwash facility to minimise transport of mud and/or fines by HGVs onto the public road network; and
- use of road sweeper to reduce the amount of available material for re-suspension:
- maintain the quality of the access road surface and restrict HGV speeds through facility.

As such, all Natura 2000 sites and any ex-situ foraging sites for SCI birds near the existing soil recovery facility will still be sufficiently distant and protected from blown dust that none of the COs for any QIs or SCIs will be undermined as a result of dust from the ongoing development.

### 4.4.5 Post Restoration

During the final restoration stage, the mitigation measures outlined above for plant and machinery, the storage of fuels and refuelling will apply. Once the importation and recovery of material completed at the site, it will be restored to native woodland and grassland. There will be no activities at the site and therefore no mitigation measures are required.

### 4.5 Conclusions

This Natura Impact Statement, based on the best available scientific information, shows that, considering the mitigation measures which are designed to prevent likely significant effects from habitat loss and groundwater pollution from the Project at Halverstown, Kilcullen, Co. Kildare, will not undermine the conservation objectives of the River Barrow and River Nore SAC, and the Poulaphouca Reservoir SPA, either alone or in-combination with other projects or plans.

Based on the information set out in this report, we submit that the Competent Authority has sufficient information to allow it to determine that the application for the intake of additional soil and continuation of activity at the existing backfilling / recovery facility at Halverstown, Kilcullen, Co. Kildare, will not have an adverse effect on the integrity or pose a risk of likely significant effects on the Natura 2000 sites of the River Barrow and River Nore SAC and the Poulaphouca Reservoir SPA, or any other Natura 2000 site.

### 5.0 **REFERENCES**

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### **FIGURES**

Figure 1 Site Location and Natura 2000 Sites







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