

APPROPRIATE ASSESSMENT SCREENING AND NATURA IMPACT STATEMENT

**Soil Waste Recovery Facility Usk, Waste License
Application, Kilcullen, Co. Kildare**

Prepared for: Dunlavin Land Restoration Ltd.

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

SLR Ref: 501.00507.00001
Version No: V3 ISSUED
February 2022



Document Control	
Document Properties	
Organisation	SLR Consulting
Project Name	Soil Waste Recovery Facility, Usk, Co. Kildare
Report Title	Soil Waste Recovery Facility AA Screening and Natura Impact statement – Usk, Co. Kildare
Author(s)	Michael Bailey
Draft version/final	FINAL
Document reference	Soil Waste Recovery Facility AA Screening and Natura Impact statement – Usk, Co. Kildare - February 2022 V2

DATE	Revision No	Prepared by	Reviewed by	Approved by	Status	Comments
22/02/2022	V1	Michael Bailey	Richard Arnold		Draft	For internal review
28/02/2022	V2	Michael Bailey	Richard Arnold		Draft	For internal review
04/03/2022	V3	Michael Bailey	Richard Arnold	Derek Luby	Final	For issue to Client / EPA

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

BASIS OF REPORT

This document has been prepared by SLR Consulting Ireland with reasonable skill, care and diligence, and taking account of the manpower, timescales and resources devoted to it by agreement with **DUNLAVIN LAND RESTORATION LTD.** (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

CONTENTS

1. INTRODUCTION	1
1.1 General Description of the Site	1
1.2 Brief Project Description	1
1.3 Purpose of the Report.....	1
1.4 Objectives of Appropriate Assessment	1
1.5 Evidence of Technical Competence and Experience	2
2. RELEVANT LEGISLATION.....	3
2.1 European Nature Directives (Habitats and Birds)	3
2.2 European Communities (Birds and Natural Habitats) Regulations 2011.....	3
2.3 Planning and Development Regulations 2001 to 2015	4
3. METHODOLOGY	5
3.1 Scope of the Report	5
3.2 Identification of Potential Zone of Influence	6
3.3 Desk Study	6
4. DESCRIPTION OF THE PROJECT.....	7
4.1 Outline Description of Project.....	7
5. APPROPRIATE ASSESSMENT SCREENING	9
5.1 Identification of Natura 2000 sites.....	9
5.2 Screening of Natura 2000 Sites.....	9
5.3 Description of the Natura 2000 Sites	10
5.4 Features of Interest and Conservation Objectives of the Natura 2000 Sites	11
5.5 Potential Impacts and Likelihood of Significant Effects.....	13
5.6 Consideration of Findings	16
6. NATURA IMPACT STATEMENT.....	17
6.1 Assessment of Effects of Project or Plan on the Integrity of River Barrow & River Nore SAC. 17	
7. CONSIDERATION OF FINDINGS.....	22
8. REFERENCES AND BIBLIOGRAPHY.....	23

TABLES

Table 1: Natura 2000 Sites within 15km of the Project Site	9
Table 2: Features of Interest and Conservation Objectives for River Barrow and River Nore SAC (002162)	12

FIGURES

Figure 1	Location of Project and Natura 2000 Site
----------	--

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

1. INTRODUCTION

SLR Consulting Ireland (SLR) was commissioned by Dunlavin Land Restoration Ltd. to submit an AA Screening Report and Natura Impact Statement in respect of a waste licence application under Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations, providing for the backfilling of a former sand and gravel pit using imported inert soil and stone waste at a facility located at Usk, Kilcullen, Co. Kildare (the application site).

1.1 General Description of the Site

The application site is located in the townland of Usk approximately 9km south-east of the town of Kilcullen, Co. Kildare, 2.5km west of the village of Dunlavin, Co. Wicklow and approximately 1.8km east of the M9 motorway at its closest point (refer to Figure 1).

The application site covers approximately 26.6 hectares (ha) out of a total landholding of 42.4ha, and comprises a worked-out sand and gravel pit. Since the cessation of mineral extraction operations at the sand and gravel pit the site has undergone some natural regeneration of vegetation on the pit floor and walls with a number of ponds formed in flooded low-lying areas of the pit floor. The Greese River flows along the eastern boundary of the application site.

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-northeast to south-southwest direction, dissects the landscape to the north-west of the former sand and gravel pit and forms a prominent landscape feature. The village of Dunlavin is the closest settlement cluster in the local area, though there are also many small scattered or isolated settlements and/or properties in the surrounding rural area, principally along the local road network.

1.2 Brief Project Description

The project specifically provides for the backfilling of a former sand and gravel pit to its former ground level using imported natural inert waste materials and/or suitable by-product materials, and installation of site infrastructure including site offices, staff welfare facilities, weighbridge (with dedicated office), wheelwash facility, hardstand areas, fuel storage tanks and site access roads.

1.3 Purpose of the Report

This report provides supporting information to assist the Competent Authority, in this case the Environmental Protection Agency (EPA), in carrying out Appropriate Assessment screening and a Stage 2 Appropriate Assessment to determine if there will be an adverse effect on the integrity of Natura 2000 sites because of the proposed development.

1.4 Objectives of Appropriate Assessment

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures to be addressed in the AA process¹ as follows:

- Firstly, a plan / project should aim to avoid any negative impacts on Natura 2000 sites by identifying possible impacts early and designing the project / plan to avoid such impacts.
- Secondly, mitigation measures should be applied during the AA process to the point where no adverse impacts on the site(s) remain.

¹ The objectives as outlined are based on those set out in Scott Wilson and Levett-Therivel, (2006).

- Thirdly a plan / project may have to undergo an assessment of alternative solutions. Under this stage of the assessment, compensatory measures are required for any remaining adverse effects, but they are permitted only if (a) there are no alternative solutions and (b) the plan / project is required for imperative reasons of overriding public interest (the 'IROPI test'). European case law highlights that consideration must be given to alternatives outside the plan / project boundary area in carrying out the IROPI test.

1.5 Evidence of Technical Competence and Experience

This Natura Impact Assessment was prepared by SLR Associate Ecologist Michael Bailey MCIEEM. Richard Arnold MCIEEM CEnv. carried out the technical review.

Michael Bailey holds a BSc (Hons) in Biology and Ecology from the University of Ulster, and an MSc in Quantitative Conservation Biology from the University of the Witwatersrand, Johannesburg, South Africa. Michael is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Michael is an experienced consultant ecologist with field and research experience with mammal, bird, bat and invasive species surveys in Ireland, the UK and Africa. He has prepared Appropriate Assessments and Ecological Impact Assessments for a wide range of infrastructure, mining and extractive industry, and renewable energy projects.

Richard Arnold has 23 years of experience as a consultant ecologist, which has included preparing and overseeing assessments under the Habitats Regulations/Directive for multiple projects, including small and large infrastructure projects. He has supported An Bord Pleanála's Inspector on three major infrastructure projects in Ireland.

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

2. RELEVANT LEGISLATION

2.1 European Nature Directives (Habitats and Birds)

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. Similarly, Special Protection Areas are classified under the Birds Directive (Council Directive 2009/147/EEC on the Conservation of Wild Birds). Collectively, Special Areas of Conservation (SAC) and Special Protection Areas (SPA) are referred to as the Natura 2000 network. In general terms, they are considered to be of exceptional importance for rare, endangered or vulnerable habitats and species within the European Community.

Under Article 6(3) of the Habitats Directive an Appropriate Assessment must be undertaken for any plan or project that is likely to have a significant effect on the conservation objectives of a Natura 2000 site. An Appropriate Assessment is an evaluation of the potential impacts of a plan or project on the conservation objectives of a Natura 2000 site, and the development, where necessary, of mitigation or avoidance measures to preclude negative effects.

Article 6, paragraph 3 of the EC 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 will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public”.

2.2 European Communities (Birds and Natural Habitats) Regulations 2011

Part 5 of the EC (Birds and Natural Habitats) Regulations 2011 also sets out the circumstances under which an ‘appropriate assessment’ is required. Section 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.’

Section 42(2) expands on this, stipulating that a public authority must carry out a screening for Appropriate Assessment before consent for a plan or project is given, or a decision to undertake or adopt a plan or project is taken. To assist a public authority to discharge its duty in this respect, Section 42(3)(a) gives it the authority to direct a third party to provide a Natura Impact Statement and Section 42(3)(b) allows it to request any additional information that is considered necessary for the purposes of undertaking a screening. A Natura Impact Statement has to include such information or data as the public authority considers necessary to enable it to ascertain if the plan or project will affect the integrity of a Natura 2000 site. Where appropriate, a Natura Impact Statement also needs to include:

- (i) the alternative solutions that have been considered and the reasons why they have not been adopted,
- (ii) the imperative reasons of overriding public interest that are being relied upon to indicate that the plan or project should proceed notwithstanding that it may adversely affect the integrity of a European site,

(iii) the compensatory measures that are being proposed.

Section 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'*.

2.3 Planning and Development Regulations 2001 to 2015

Section 250 of the Planning and Development Regulations 2001 to 2015 also sets out the circumstances under which an 'appropriate assessment' is required.

Section 250 (1) requires that *'In order to ascertain whether an appropriate assessment is required in respect of a development which it proposes to carry out a local authority shall carry out a screening of the proposed development to assess, in view of best scientific knowledge, if the development, individually or in combination with other plans or projects, would be likely to have a significant effect on a European site.'*

Section 250 (2) states that *"If on the basis of a screening under sub- article (1) it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, would have a significant effect on a European site, the local authority shall determine that an appropriate assessment of the proposed development is required and shall prepare an NIS in respect of the proposed development and shall submit the proposed development to the Board for approval under section 177AE of the Act."*

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

3. METHODOLOGY

3.1 Scope of the Report

This report has been split in to two sections:

- Stage 1: the screening appropriate assessment report; and
- Stage 2: Appropriate Assessment: the Natura impact assessment (NIS).

The approach to preparing the screening report section is as follows:

- Identify Natura 2000 sites, within the potential zone of influence of the development / works.
- Identify the features of interest of the Natura 2000 sites and review their conservation objectives.
- Review whether there is potential for the features of interest to be affected by the proposed works based on information such as the vulnerabilities of the Natura 2000 site, proximity to the Site and the nature and scale of the works associated with the proposed development / works.
- Consider the likelihood of potential impacts occurring based on the information collated and professional judgement.
- Consider the likelihood of cumulative effects arising from the project in-combination with other plans and projects.
- Identify the likelihood of significant effects in the absence of mitigation, alone or in – combination, on Natura 2000 sites occurring because of the proposed development / works.

The approach for preparing the scope of the second stage NIS section is as follows:

- Set out information on the Natura 2000 sites identified at screening stage as likely to be significantly affected by the project.
- Describe the elements of the project or plan (alone or in combination with other projects or plans) that are likely to give rise to significant effects on the environment.
- Set out the conservation objectives of the site.
- Describe how the project or plan will affect key species and key habitats. Acknowledge uncertainties and gaps in information.
- Describe how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project or plan (e.g. loss of habitat, disturbance, disruption, chemical changes, hydrological changes and geological changes, etc.). Also acknowledge uncertainties and any gaps in information.
- The appropriate assessment is carried out by the competent authority and is supported by this NIS (EHLG, 2009).

The approach taken in preparing this document is based on standard methods and guidance, as listed in the references section of this report.

3.2 Identification of Potential Zone of Influence

The 'zone of influence' for a project is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries. The zone of influence will vary for different ecological features depending on their sensitivity to an environmental change (CIEEM, 2016).

A distance of 15 km is currently recommended *in the case of plans*, as a potential zone of influence, and this distance is derived from UK guidance (Scott Wilson *et al*, 2006). *For projects*, the distance could be much less than 15km, and in some cases less than 100m, but National Parks and Wildlife Service guidance (NPWS 2009) advises that this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects.

The potential Zone of Influence for waste recovery facilities, such as the one at Usk, is typically limited to 2 km unless there are surface water pathways or other ecological connections to Natura 2000 sites outside this distance. The effects of waste recovery facilities are unlikely to extend beyond this distance unless there is potential for impacts on ground water or surface water that may result in effects beyond this zone.

However, the proposed waste recovery facility lies adjacent to the Greese and Kildoon Rivers, both of which form tributaries of the River Barrow. It is likely that there is a hydrological connection between the groundwaters at the proposed waste recovery facility and the surface waters of these rivers, creating a potential hydrological source-pathway-receptor link between it and the River Barrow and River Nore SAC.

For these reasons, the potential zone of influence has been set at 15 km for this project.

3.3 Desk Study

A desk study was carried out to collate information available on Natura 2000 sites within the potential zone of influence of the waste recovery facility (Figure 1). The Site and the surrounding area were viewed using existing available satellite and street view imagery² (last accessed on 07 February 2022). Kilkenny County Council planning portal was accessed for information on other planning applications within the Site and immediate area (last accessed 07 February 2022). The National Parks and Wildlife Service (NPWS)³ (last accessed 07 February 2022) and National Biodiversity Data Centre (NBDC)⁴ (last accessed 07 February 2022) websites were accessed for information on Natura 2000 sites.

The Chapters prepared for the SLR (2021) EIAR submitted with this planning application such as Chapter 2: Project Description, Chapter 7: Water, Chapter 10: Noise and Chapter 13: Landscape, were also further reviewed to inform this report.

² <https://www.google.ie/maps> & <https://www.bing.com/maps>

³ <https://www.npws.ie/protected-sites>

⁴ <http://maps.biodiversityireland.ie/#/Map>

4. DESCRIPTION OF THE PROJECT

4.1 Outline Description of Project

The project comprises the proposed backfilling and restoration of the former sand and gravel pit, using imported inert waste material, at Usk.

Planning permission is sought specifically for the following :

- Backfilling of a former sand and gravel pit to its former ground level using approximately 1,240,000 tonnes of imported natural inert waste materials and/or suitable by-product materials, principally soil and stone generated by construction and development projects;
- Establishment and operation of an inert soil waste recovery facility to provide for the recovery through backfilling, of natural inert soil and stone waste;
- Installation of site infrastructure including site offices, staff welfare facilities, weighbridge (with dedicated office), wheelwash facility, hardstand areas, fuel storage tanks and site access roads;
- Use of an existing storage shed as a waste inspection and quarantine facility and for storage of plant and equipment;
- Separation of any intermixed construction and demolition waste (principally concrete, metal, timber, PVC pipes and plastic) inadvertently imported to site prior to removal off-site to authorised waste disposal or recovery facilities;
- Temporary stockpiling of imported topsoil pending re-use as cover material for the final restoration of the site;
- Restoration of the final backfilled landform to long-term grassland / agricultural use.

The proposed inert waste recovery facility site will operate from 07:00 hours to 18:00hrs Monday to Friday and 08:00 hours to 16:00 hours on Saturday. No operations will take place outside these times.

Based on a maximum intake tonnage of 300,000 tonnes per annum, a 48 working week and 5.5 working days, the inert soil waste recovery facility is anticipated to generate an average annual daily traffic (ADDT) of 114 heavy goods vehicle (HGV) movements in and out of the site per day.

All waste imported to the recovery facility for backfilling and restoration purposes will be inert. It is envisaged that the imported intake to the facility will comprise the following wastes on the List of Wastes (LoW) published by the Environment Protection Agency (EPA):

- 17 05 04 Soil and stones other than those mentioned in 17 05 03.
- 17 05 06 Dredging spoil other than those mentioned in 17 05 05
- 20 02 02 Soil and stone from municipal facilities

Any imported waste which is accepted at the facility but subsequently suspected to be non-compliant with waste acceptance criteria for the facility will be re-loaded onto HGV trucks and transferred across the application site to the waste inspection and quarantine facility (comprising an existing covered shed over a sealed concrete slab) for closer examination and/or testing.

Should any subsequent inspection or testing of suspect soil waste at the inspection and quarantine facility identify non-inert material which cannot be accepted or reused in the restoration of the application site, it will be segregated and temporarily stockpiled (quarantined) pending removal off site by permitted waste collectors to an authorised waste disposal and/or recovery facility. Provision will also be made for temporary storage of any separated non-inert construction and demolition waste (including metal, timber, plastic etc.) in skips prior to removal off site to a licenced recovery facility.

Fuel will be stored in bunded tanks located beside the waste quarantine facility at the northern end of the application site. Oils and lubricants are stored on suitable spill pallets in a designated storage container which will also be located at the northern end of the application site. All refuelling of plant and machinery will take place over a concrete hardstanding area in front of the fuel tanks. Surface water run-off from the concrete hardstand area will be captured by sub-surface drainage pipes and passed through a hydrocarbon interceptor before being discharged to ground via a soakaway / infiltration area.

All incidental rainfall and surface water run-off from the inert waste recovery facility will be allowed to naturally percolate into the ground. Where required, any surface water run-off over the ground surface will be collected and transferred (by open channels, pipework and/or pumping) to groundwater ponds at the eastern side of the site and allowed to percolate naturally to ground / groundwater thereafter. There will be no surface water discharge off-site to any watercourse and/or waterbody off-site and there will be no requirement for any land drainage to connect to any surface watercourse and/or waterbody off-site.

Following cessation of recovery activities the proposed facility will be restored to agricultural grassland using previously stripped subsoils and topsoil stockpiled on-site and additional topsoil imported for backfilling and soil recovery purposes.

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

5. APPROPRIATE ASSESSMENT SCREENING

5.1 Identification of Natura 2000 sites

The application site is not within a site designated for nature conservation or subject to any nature conservation designations, and the project is not directly connected with or necessary to the management of the site as a European Site.

There are six Natura 2000 site within a 15km radius of the application site at Usk. These sites are listed in Table 1 and their location in relation to the application site are shown on Figure 1.

Table 1: Natura 2000 Sites within 15km of the Project Site

Natura 2000 Site	Site Code	Location at Closest Point to the Project Site
Slaney River Valley SAC	000781	7.7km south east
Wicklow Mountains SAC	002122	11.0km south east
River Barrow and River Nore SAC	002162	11.6km west northwest
Poulaphouca Reservoir SPA	004063	11.9km east
Wicklow Mountains SPA	004040	12.3km north east
Pollardstown Fen SAC	000396	14.0km north west

5.2 Screening of Natura 2000 Sites

Based on the size and nature of the proposed backfilling and restoration of the former sand and gravel pit at Usk using imported inert waste material, the maximum distance for which the project should be evaluated in terms of Natura 2000 sites is up to a maximum radius of 2km from the application site, unless there are any potential source-pathway-receptor links between the proposed project and any Natura 2000 site(s) outside this distance.

At a distance greater than 2km, and in the absence of any potential source-pathway-receptor link, and in view of best scientific knowledge and in view of the conservation objectives of the sites no Natura 2000 sites would be affected by any direct loss of habitat or impacted upon by any effects arising from disturbance (i.e. noise, vibration and human and visual disturbance), the effects of dust deposition, or traffic emissions.

The nearest Natura 2000 site is the Slaney River Valley SAC which lies 7.7 km to the south-east of the proposed waste recover facility and there is no ecological or hydrological link to this site. There are also no ecological or hydrological links to Wicklow Mountains SAC, Poulaphouca Reservoir SPA, Wicklow Mountains SPA or Pollardstown Fen SAC, and therefore, along with the Slaney River Valley SAC, and considered the project alone and in combination with other projects, all of these sites have been screened out from any further assessment.

However, the proposed waste recovery facility lies adjacent to the Greese and Kildoon Rivers, both of which form tributaries of the River Barrow and as there is a likely hydrological connection between the groundwaters under the site and the surface waters of these rivers, there is a potential hydrological source-pathway-receptor link between it and the River Barrow and River Nore SAC. Therefore, the River Barrow and River Nore SAC alone has been considered further within this Screening Report section.

5.3 Description of the Natura 2000 Sites

River Barrow and River Nore SAC (Site Code 0021620)

This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The larger of the many tributaries include the Lerr, Fushoge, Mountain, Aughavaud, Owenass, Boherbaun and Stradbally Rivers of the Barrow, and the Delour, Dinin, Erkina, Owveg, Munster, Arrigle and King's Rivers on the Nore.

Good examples of alluvial forest (a priority habitat on Annex I of the E.U. Habitats Directive) are seen at Rathsnagadan, Murphy's of the River, in Abbeyleix estate and along other shorter stretches of both the tidal and freshwater elements of the site. Eutrophic tall herb vegetation occurs in association with the various areas of alluvial forest and elsewhere where the floodplain of the river is intact.

Petrifying springs with tufa formations occurs at Dysart Wood along the Nore. This is a rare habitat in Ireland, and one listed with priority status on Annex I of the E.U. Habitats Directive. These hard water springs are characterised by lime encrustations, often associated with small waterfalls.

The best examples of old oak woodlands are seen in the ancient Park Hill woodland in the estate at Abbeyleix; at Kyleadahir, on the Delour, Forest Wood House, Kylecorragh and Brownstown Woods on the Nore; and at Cloghristic Wood, Drummond Wood and Borris Demesne on the Barrow. Oak woodland also covers parts of the valley side south of Woodstock and is well developed at Brownsford where the Nore takes several sharp bends. There is an excellent example of relatively undisturbed, relict oak woodland with a very good tree canopy on the steeply sloping banks of the River Nore, about 5 km west of New Ross.

Floating river vegetation is well represented in the Barrow and in the many tributaries of the site and dry heath occurs in pockets along the steep valley sides of the rivers especially in the Barrow Valley and along the Barrow tributaries where they occur in the foothills of the Blackstairs Mountains. The dry heath generally grades into wet woodland or wet swamp vegetation lower down the slopes on the riverbanks.

*Salt meadows occur at the southern section of the site in old meadows where the embankment has been breached, along the tidal stretches of in-flowing rivers below Stokestown House, in a narrow band on the channel side of Common Reed (*Phragmites australis*) beds, and in narrow fragmented strips along the open shoreline. In the larger areas of salt meadow the Atlantic and Mediterranean sub types are generally intermixed. At the upper edge of the salt meadow in the narrow ecotonal areas bordering the grasslands where there is significant percolation of salt water, the legally protected species Borrer's Saltmarsh-grass (*Puccinellia fasciculata*) and Meadow Barley (*Hordeum secalinum*) are found.*

Where the Nore reaches the sea, the estuary and the other E.U. Habitats Directive Annex I habitats within it form a large component of the site and good quality intertidal sand and mudflats have developed on a linear shelf on the western side of Waterford Harbour.

*The western shore of the harbour is generally stony and backed by low cliffs of glacial drift, and the dunes which fringe the strand at Duncannon are dominated by Marram (*Ammophila arenaria*) towards the sea.*

Other habitats which occur throughout the site include wet grassland, marsh, reedswamp, improved grassland, arable land, quarries, coniferous plantations, deciduous woodland, scrub and ponds.

*The site is very important for the presence of a number of E.U. Habitats Directive Annex II animal species including Freshwater Pearl Mussel (both *Margaritifera margaritifera* and *M. m. durrovensis*), White-clawed Crayfish, Salmon, Twaite Shad, three lamprey species – Sea Lamprey, Brook Lamprey and River Lamprey, the tiny whorl snail *Vertigo moulinsiana* and Otter. This is the only site in the world for the hard water form of the Freshwater Pearl Mussel, *M. m. durrovensis*, and one of only a handful of spawning grounds in the country for Twaite Shad. The freshwater stretches of the River Nore main channel is a*

designated salmonid river. The upper stretches of the Barrow and Nore, particularly the Owenass River, are very important for spawning.

The site also supports many other important animal species such as Daubenton's Bat, Badger, Irish Hare and Common Frog which are all listed in the Irish Red Data Book.

The site is of ornithological importance for a number of E.U. Birds Directive Annex I species, including Greenland White-fronted Goose, Whooper Swan, Bar-tailed Godwit, Peregrine and Kingfisher. Nationally important numbers of Golden Plover and Bar-tailed Godwit are found during the winter.

Land use at the site consists mainly of agricultural activities – mostly intensive in nature and principally grazing and silage production. Slurry is spread over much of the area. Arable crops are also grown. The spreading of slurry and fertiliser poses a threat to the water quality of the salmonid river and to the populations of E.U. Habitats Directive Annex II animal species within the site. Fishing is a main tourist attraction along stretches of the main rivers and their tributaries.

The main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and several sewage plants, over-grazing within the woodland areas, and invasion by non-native species, for example Cherry Laurel (*Prunus laurocerasus*) and Rhododendron (*Rhododendron ponticum*). The water quality of the site remains vulnerable. Good quality water is necessary to maintain the populations of the Annex II animal species listed above. Good quality is dependent on controlling fertilisation of the grasslands, particularly along the Nore.”

5.4 Features of Interest and Conservation Objectives of the Natura 2000 Sites

The Features of Interest and Conservation Objectives of the River Barrow and River Nore SAC are given in Table 1 below. This information was obtained from the NPWS website (last accessed on 7 February 2022).

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

Table 2: Features of Interest and Conservation Objectives for the River Barrow and River Nore SAC (002162)

Natura 2000 Site	Distance from Site	Features of Interest	Conservation objectives
River Barrow and River Nore SAC (002162)	11.6 km	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 (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Water courses of plain to montane levels with the <i>Ranuncion-fluitantis</i> and <i>Callitriche-Batrachion</i> 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 (<i>Cratoneurion</i>) [7220] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0] <i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016] <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Lampetra fluviatilis</i> (River Lamprey) [1099] <i>Alosa fallax fallax</i> (Twaite Shad) [1103] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355] <i>Trichomanes speciosum</i> (Killarney Fern) [1421] <i>Margaritifera durrovensis</i> (Nore Pearl Mussel) [1990]	Objective: 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: The detailed conservation objectives developed in light of a defined list of attributes and targets for each feature of interest is available at https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf

5.5 Potential Impacts and Likelihood of Significant Effects

The available information on the one Natura 2000 site screened in for further assessment (the River Barrow and River Nore SAC) was reviewed to establish whether the proposed waste recovery facility is likely to have a significant effect on its features of interest. The potential for impacts and likelihood of significant effects on the features of interest identified in this report is based on information collated from the desk study, the nature of the project i.e. the backfilling of a former sand and gravel pit using imported inert soil and stone waste, and the detailed information provided in the relevant chapters of the EIAR for the proposed development.

The likelihood of significant effects, which could undermine the conservation objectives of the River Barrow and River Nore SAC, cannot be excluded in light of the type and scale of the proposed project, and the location of the application site.

This screening report has been prepared following the Cause – Pathway – Effect model. The potential impacts of projects such as waste recovery facilities are summarised into the following categories for screening purposes.

- Direct impacts refer to habitat loss or fragmentation arising from land-take requirements for development or agricultural purposes. Direct impacts can be a result of change in land use or management, such as the removal of agricultural practices that prevent scrub encroachment or the introduction of new activities such as aquaculture.
- Indirect and secondary impacts do not have a straight-line route between cause and effect. It is potentially more challenging to ensure that all the possible indirect impacts of the plan/project – in combination with other plans and projects - have been established. These can arise, for example, when a development alters the hydrology of a catchment area, which in turn affects the movement of groundwater to a site and the qualifying interests that rely on the maintenance of water levels. Deterioration in water quality can occur as an indirect consequence of development, which in turn changes the aquatic environment and reduces its capacity to support certain plants and animals. The introduction of invasive species can also be defined as an indirect impact. Disturbance to fauna can arise directly through the loss of habitat (e.g. the loss of foraging or breeding areas for mammals or birds) or indirectly through noise, vibration and increased activity associated with construction and operation.

The potential impacts that could occur as a result of the proposed waste recovery facility are discussed in the following sections.

Identification of potential impacts on Natura 2000 sites

The proposed waste recovery facility at Usk has the potential to result in impacts on Natura 2000 sites due to the following:

- Noise and vibration to air.
- Emissions to air.
- Emissions to surface water.
- Pollution of groundwater.

There will be no loss of habitat within the Natura 2000 site and there will be no barrier to movement of species listed as features of interest as a result of the proposed waste recovery facility at Usk.

Noise and vibration to air

Chapter 10, Noise, of the EIAR shows that the predicted operational noise for the nearest ecological receptor, Dunlavin Marshes pNHA 200 m north of the site, will be 30 $L_{Aeq, 1HR}$ dB(A), which is 25 below the noise limit of 55 $L_{Aeq, 1HR}$ dB(A), in accordance with NG4⁵ guidance. As the nearest Natura 2000 site is 7.7 km from the site, there will be no effect on any Natura 2000 site as a result of the proposed waste recovery operations.

The features of interest of the Natura 2000 sites likely to be affected by noise or vibration, such as SPA bird species, are sufficiently distant from the waste recovery facility so as to remain unaffected by any operational noise or vibration. Features of interest from the SPA sites within 15 km of the waste recovery facility are not likely to be found within the Site or in the immediate area as these species are dependent on the aquatic or upland habitats associated with the SPAs for feeding and roosting.

An operational vibration assessment was not undertaken for the proposed waste recovery site as previous SLR experience of operations at other waste recovery facilities has identified that little or no vibration arises from activities of this nature, and therefore, no Natura 2000 site will be affected by operational vibration.

Emissions to air

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. Where large amounts of dust are deposited on vegetation over a long timescale (a full growing season for example) there may be some adverse effects upon plants restricting photosynthesis, respiration, and transpiration.

Baseline dust deposition monitoring at the site indicates that the levels of dust at the application site are low and well below the level of 1000 mg/m²/day, where it is considered that dust could be likely to have a significant effect on sensitive ecosystems.

Using a screening assessment tool, the Air Quality Assessment considers that there is generally an insignificant to moderate adverse risk that dust may cause an impact at sensitive receptors within 500m of the source of the dust generated activities.

Based on the above, it is concluded that the planned development will have an insignificant dust deposition impact on ecological receptors; no Natura 2000 site will be affected by air emissions due to the nature of the development and distance from the waste recover facility.

Emissions to surface water

There will be no off-site discharge of surface water from the application site to any nearby watercourse (the nearest being a channel flowing in a southerly direction along the eastern boundary of the application site), and therefore there are no direct impacts on surface water quality or quantity from the proposed waste recover facility.

Due to the high permeability of the underlying subsoils, rainfall is expected to infiltrate rapidly to underlying / surrounding ground and no significant overground flows of surface water run-off will arise from any existing paved or hardstanding areas. As a consequence, no provision is made in this application for surface water drainage or discharge infrastructure.

Wastewater from the proposed site offices and site welfare facilities (including toilets, wash hand basins and sinks) will be discharged to a wastewater treatment plant and thereafter to a sand polishing filter prior to infiltration to ground. The proposed treatment system will comprise

⁵ The Environmental Protection Agency's (EPA) 2016 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)'

- (i) a Tricel Novo Package Plant which provides on-site secondary wastewater treatment using submerged aeration filter technology and
- (ii) a Sandcel sand polishing filter to provide tertiary treatment by distributing treated effluent over stratified sand layers.

Once installed, the wastewater treatment system and related infrastructure will be regularly maintained.

There are no records of recurring flooding at or close to the site.

Pollution of groundwater

The closest surface water feature to the site is a channel immediately beyond the eastern boundary of the site, which is likely to be fed by groundwater flowing through subsoil deposits beneath the application site. This channel is connected to the River Greese which flows in a southerly direction to its confluence with the River Barrow north of Carlow Town. At this point the River Barrow is part of the River Barrow and River Nore SAC.

As there is potential hydrological connectivity from groundwater to surface water, any potential direct impacts to groundwater could also potentially indirectly impact the River Greese and therefore the River Barrow and River Nore SAC further downstream.

The proposed waste recovery will be undertaken using inert soil and stone only. However, in the event of the unintentional importation of non-inert material there is the potential to impact the groundwater quality of the underlying poor bedrock aquifer and local well supplies. The importation of soil and stone could also impact groundwater quality at the site in terms of increased suspended solids.

Accidental spills or leaks of fuels and other petroleum-based products (lubricating oils, greases etc.) from plant and machinery, or the storage of such materials also has the potential to adversely impact groundwater quality and therefore indirectly affect the surface water quality in the River Greese and the River Barrow and River Nore SAC.

Therefore, this aspect of emissions to water should be carried forward into the Stage 2 Assessment as it could affect the integrity of the qualifying features of the River Barrow and River Nore SAC.

Cumulative Effects

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 in-combination with impacts of other proposed or permitted plans and projects, can result in significant effects.

Other plans and projects that should be considered when establishing cumulative effects are:

- proposals for which consent has been applied but which are awaiting determination;
- projects which have been granted consent, but which have not yet been started or which have been started but are not yet completed (i.e. under construction);
- proposals which have been refused permission, but which are subject to appeal, and the appeal is undetermined;
- constructed developments whose full environmental effects are not yet felt and therefore cannot be accounted for in the baseline; or
- developments specifically referenced in a National Policy Statement, a National Plan or a Local Plan.

Potential direct and indirect impacts on ground water and surface water quality respectively, because of the waste recovery activities at Usk, have been identified and other plans and projects (as described above) were considered in – combination with the waste recovery facility at Usk for cumulative effects. 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 in-combination with impacts of other proposed or permitted plans and projects, can result in significant effects.

A search of the Wicklow and Kildare County Council online planning search facilities indicates that there are no other major planned developments in the vicinity of the application site in Usk townland or in the surrounding townlands that have been granted planning permission in the last five years and have the potential to give rise to any significant adverse cumulative impacts on the local environment.

There are no policies or objectives within the Kildare County Development Plan that when considered with the proposed waste recovery facility could give rise to cumulative effects on Natura 2000 sites.

Cumulative effects are not considered likely to occur due to the proposal to backfill a former sand and gravel pit using imported inert soil and stone waste for a facility located at Usk, Kilcullen, Co. Kildare, when considered with other plans and projects.

Likelihood of Significant Effects

It is considered that there is potential for impacts on one of the Natura 2000 sites within the 15 km potential zone of influence, due to the activities at the proposed waste recovery facility at Usk, co. Kildare. Therefore, in the absence of consideration of suitable mitigation, likely significant effects on this Natura 2000 site either alone or in-combination with other plans and projects cannot be excluded.

5.6 Consideration of Findings

This screening report for Appropriate Assessment, based on the best available scientific information, shows that the proposal to backfill a former sand and gravel pit using imported inert soil and stone waste for a facility located at Usk, Co. Kildare, in the absence of the implementation of suitable mitigation, could pose a risk of likely significant effects on the Natura 2000 site: River Barrow and River Nore SAC.

6. NATURA IMPACT STATEMENT

This Natura Impact Statement (NIS) was prepared as part of a waste licence application to the EPA under Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations, for a proposed waste recovery facility located at Usk, Kilcullen, Co. Kildare.

The Competent Authority, in this case the EPA, will therefore be required to carry out an appropriate assessment to determine whether the proposed waste recovery facility would adversely affect the integrity of River Barrow and River Nore SAC (002162). The '*integrity of the 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'⁶.

6.1 Assessment of Effects of Project or Plan on the Integrity of River Barrow & River Nore SAC

The headings within the appropriate assessment report template provided in the European Commission guidance document assessment of plans and projects significantly affecting Natura 2000 sites have been used to provide a framework to examine the potential impacts of the proposed waste recovery facility on the River Barrow and River Nore SAC

This section of the report sets out the potential implications of the plan or project (either 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. Where this is not the case, adverse effects must be assumed.

Description of European (Natura) 2000 sites

The description of the Natura 2000 site brought forward to the Stage 2 assessment can be found in the Screening Report section above.

Describe the elements of the project or plan (alone or in combination with other projects or plans) that are likely to give rise to significant effects on the environment.

The element of the project identified as having potential to affect River Barrow and River Nore SAC are as follows:

- Adverse effects on groundwater quality from accidental spills or leaks of fuels and other petroleum-based products (lubricating oils, greases etc.) from plant and machinery, or the storage of such materials, leading to indirect effects on surface water.
- Unintentional importation of non-inert material there is the potential to impact the groundwater quality of the underlying poor bedrock aquifer and local well supplies.

In summary, there is a channel immediately beyond the eastern boundary of the site, which is likely to be fed by groundwater flowing through subsoil deposits beneath the application site. This channel is connected to the River Greese which is a tributary of the River Barrow which is part of the River Barrow and River Nore SAC. Any effects on the groundwater passing under the waste recovery facility could indirectly impact the water quality in the River Greese and the River Barrow and River Nore SAC further down-stream.

⁶ http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision_of_art6_en.pdf

Set out the conservation objectives of the site

The conservation objectives for the River Barrow and River Nore SAC are as follows:

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

- Estuaries [1130]
- Mudflats and sandflats not covered by seawater at low tide [1140]
- *Vertigo moulinsiana* (Desmoulin's Whorl Snail) [1016]
- *Austropotamobius pallipes* (White-clawed Crayfish) [1092]
- *Salicornia* and other annuals colonising mud and sand [1310]
- Killarney fern *Trichomanes speciosum* [1421]
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-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]

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

- *Margaritifera margaritifera* (Freshwater Pearl Mussel) [1029]
- *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]
- Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) [1330]
- *Lutra lutra* (Otter) [1355]
- Mediterranean salt meadows (*Juncetalia maritimi*) [1410]
- *Margaritifera durrovensis* (Nore Pearl Mussel) [1990]
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [91A0]
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) [91E0]

Describe how the project or plan will affect key species and key habitats. Acknowledge uncertainties and gaps in information

There is the potential for indirect effects on the key species, such as otter, crayfish, salmon, twaite shad, lamprey, and Freshwater and Nore Pearl Mussel, listed as features of interest of River Barrow and River Nore SAC due to potential degradation of water quality in the River Greese and River Barrow, as a result of a reduction of groundwater quality from chemical contaminants which recharges the channel which discharges into the River Greese.

Describe how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project or plan (e.g. loss of habitat, disturbance, disruption, chemical changes, hydrological changes and geological changes, etc.). Acknowledge also uncertainties and any gaps in information.

A reduction in groundwater and subsequent surface water quality from accidental spills or leaks of fuels and other petroleum-based products (lubricating oils, greases etc.) from plant and machinery, or the storage of such materials, has the potential to impact the water quality of the River Barrow which are important for key species, such as otter, crayfish, salmon, twaite shad, lamprey, and Freshwater and Nore Pearl Mussel, which are particularly sensitive to changes in water quality. For example, the conservation objective for White-clawed crayfish is to maintain the water quality index at a level of at least Q3-4 at all sites sampled by the EPA.

Describe what mitigation measures are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of the site. Acknowledge uncertainties and any gaps in information.

While limited adverse effects on the integrity of River Barrow and River Nore SAC are anticipated as a result of the proposal to backfill a former sand and gravel pit using imported inert soil and stone waste, the following mitigation measures are included as 'designed-in' mitigation and provide certainty that the SAC will not be affected by the proposed waste recovery facility operations at Usk, Co. Kildare.

During the construction / site preparation stage potential impacts have been identified on groundwater quality from accidental spills or leaks of fuels and other petroleum-based products (lubricating oils, greases etc.) from plant and machinery, or the storage of such materials.

The following mitigation measures will be implemented at the site during this site preparation stage:

- surface water run-off will be managed during the site preparation works and will either be allowed to infiltrate to the ground or will be directed to the ponds in the south-eastern part of the site where the water will infiltrate to the ground and underlying gravels;
- no refuelling or plant / machinery maintenance and repairs will take place in the proposed restoration area to prevent accidental spillages reaching the ground or being washed off by surface water run-off;
- routine maintenance / repairs of plant and machinery will take place under cover in the existing shed or on the hardstand refuelling area beside it. More extensive / non-routine maintenance of plant and machinery will take place at off-site locations;
- all mobile plant and machinery refuelling will take place at the existing hard stand refuelling area at the site, located beside the shed;
- all plant will be regularly maintained and inspected daily for leaks of fuels, lubricating oil or other contaminating liquids;
- a spill kit and drip trays will be kept on site and will be deployed if there is an accidental leak from any plant or machinery;
- plant operators will be briefed during 'toolbox' talks and site induction on where the spill kit is kept and how and when it should be deployed;
- a traffic management system will be put in place to reduce the potential accidents between vehicles, thereby reducing the risk of a collision which could result in a fuel spill; and
- a site speed limit will be enforced to further reduce the likelihood and significance of collisions and hence the possibility of a fuel leak from such a collision.

During the operational stage, potential impacts have been identified on groundwater quality from potential accidental spills or leaks of fuels and other petroleum-based products (lubricating oils, greases etc.) from plant and machinery, or the storage of such materials.

The measures previously identified for implementation during the construction / site preparation stage will continue to be implemented over the course of the operational (backfilling / recovery) stage, together with the additional measures outlined below:

- surface water run-off over backfilled ground (if any) will be directed to the ponds in the south-eastern part of the site where sediment will settle and water will infiltrate to the ground and underlying gravels;
- no refuelling or plant / machinery maintenance and repairs will take place in the proposed restoration area to prevent accidental spillages reaching the ground or being washed off by surface water run-off;
- there will be no fuel storage within the restoration area; fuel storage will continue at the bunded storage facility at the existing shed;
- all petroleum-based products (lubricating oils, waste oils, etc.) will be stored on drip trays under cover, principally in a designated storage container to be located at the northern end of the site infrastructure area, thereby preventing pollution risk due to accidental leakages;
- imported soil and stone will only be accepted from pre-approved development sites which will have been pre-screened, where the land use history of the site is known, and no potentially contaminating activities have occurred in the past and soil samples have been pre-tested to confirm materials are inert;
- site screening will involve a site investigation and soil quality testing to confirm that the material at the site is inert and comply with site acceptance criteria;
- no peat, contaminated soils (i.e. those with excessive levels of pesticides, nutrients and organic matter) or non-hazardous waste will be accepted at the proposed recovery facility. The proposed development will include the separation of any construction and demolition waste (principally concrete, metal, timber, PVC pipes and plastic) inadvertently imported to site prior to removal off site to authorised waste disposal or recovery facilities;
- to ensure that contaminated material is not accidentally imported, representative samples will be regularly taken by the Applicant from incoming consignments and subject to confirmatory (compliance) testing focused on key contaminant indicators. These data shall be used to confirm that the accepted soils are inert and comply with acceptance criteria;
- any imported waste which is accepted at the facility but subsequently suspected to be non-compliant with the waste acceptance criteria for the facility will be re-loaded onto HGV trucks and transferred to the existing covered shed (with concrete floor slab) which will act as a waste inspection and quarantine facility for closer examination and/or testing. No incident rainfall will come into contact with consignments of suspected contaminated waste stored at the covered shed;
- 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 restoration of this site, it will be removed off site by permitted waste collectors to authorised waste disposal or recovery facilities;
- provision will also be made for temporary storage of any separated non-inert construction and demolition waste (including metal, timber, plastic etc.) in skips prior to removal off site to a licenced recovery facility; and

- storm surface water runoff from across the site will be directed to the ponds located in the south-eastern corner of the site, which are to be retained, where the storm water will infiltrate naturally to the underlying gravels. This measure will ensure the recharge of the underlying gravels despite the importation of low permeability soil materials to the site.

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

7. CONSIDERATION OF FINDINGS

Considering the project with mitigation measures, the proposal to backfill a former sand and gravel pit using imported inert soil and stone waste at Usk, Co. Kildare, is not likely to undermine the conservation objectives for the River Barrow and River Nore SAC, either alone or in-combination with other projects or plans. The above mitigation measures are standard “*designed in*” and additional mitigation typical of waste recovery facility developments will ensure that the conservation objectives for SAC will not be undermined by the proposed waste recovery facility at Usk. No additional specific mitigation measures are deemed necessary.

Based on the information set out in this report we submit that the competent authority has sufficient information to allow them to determine that the proposed waste recovery facility project, individually or in combination with other plans or projects, will not have an adverse effect on the integrity of the River Barrow and River Nore SAC, nor any other European site.

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

8. REFERENCES AND BIBLIOGRAPHY

Chartered Institute of Ecology and Environmental Management (2016). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal*. Second Edition. Published by CIEEM, Winchester.

DoEHLG (2009). *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government. Dublin.

European Union Habitats Directive, (1992). *Council Directives 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.*

Kettunen, M, Terry, A., Tucker, G. & Jones A. (2007) *Guidance on the maintenance of landscape features of major importance for wild flora and fauna - Guidance on the implementation of Article 3 of the Birds Directive (79/409/EEC) and Article 10 of the Habitats Directive (92/43/EEC)*. Institute for European Environmental Policy (IEEP), Brussels, 114 pp. & Annexes.

NPWS (2011) *Conservation objectives for River Barrow and River Nore SAC 002162. Version 1.0.* Department of Culture, Heritage and the Gaeltacht

NPWS (2016) *Site synopsis for River Barrow and River Nore SAC 002162.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht

NPWS (2020) *Natura 2000 Standard Data Form for River Barrow and River Nore SAC 002162.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht

Scott Wilson and Levett-Therivel, (2006). *Appropriate Assessment of Plans.* Scott Wilson, Levett-Therivel Sustainability Consultants, Treweek Environmental Consultants and Land Use Consultants.

SLR (2021) EIAR – *Recommencement and Deepening of Existing Quarry and Associated Processing Area.* Written for Lagan Minerals Ltd.

Websites

Bing Maps <https://www.bing.com/maps/preview> (Last accessed 07 February 2022)

Sligo County Council Planning Portal

<http://www.sligococo.ie/planning/SearchPlanningApplications/OnlinePlanningTools/> (Accessed 07 February 2022)

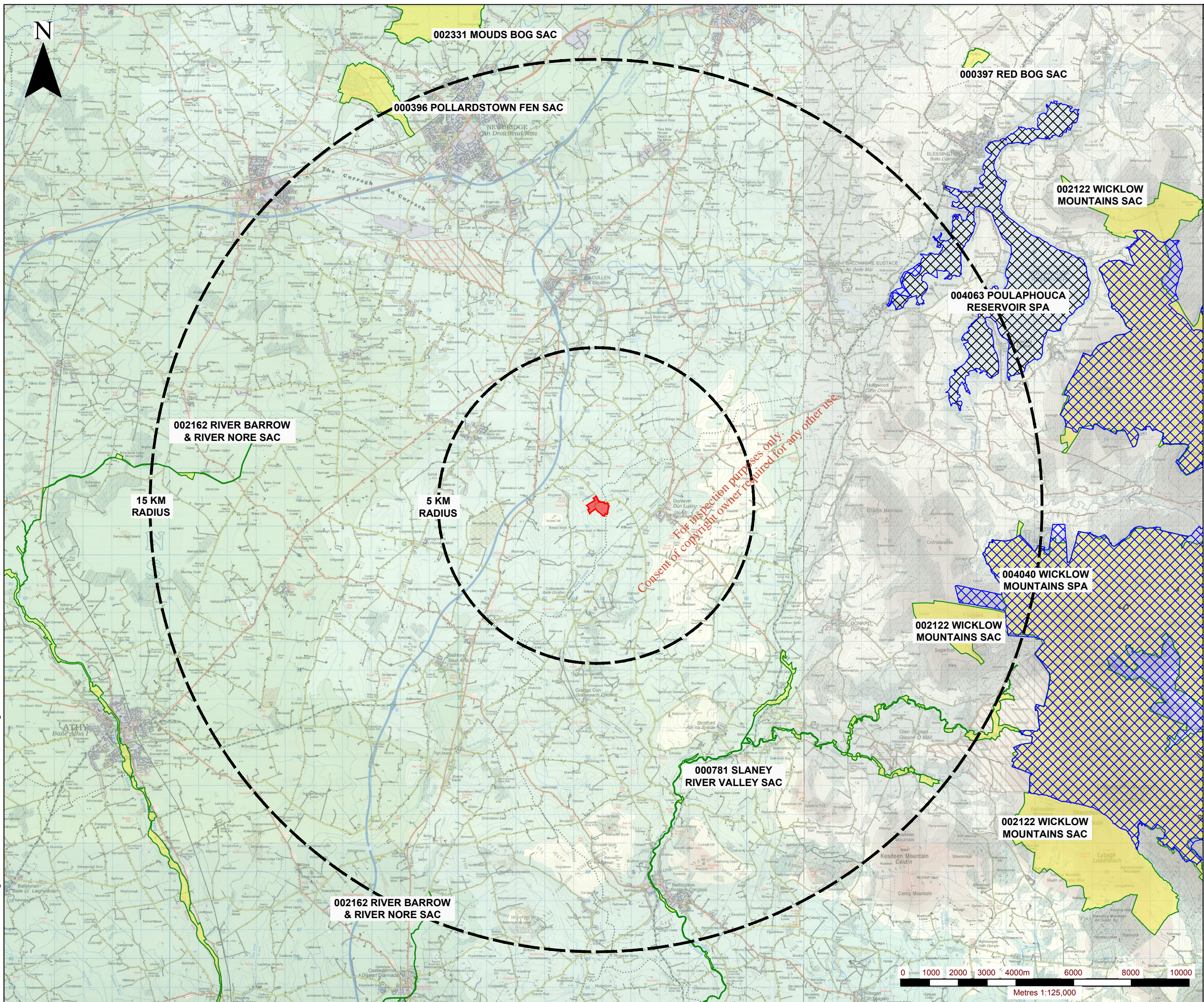
National Parks and Wildlife Services Protected Sites <https://www.npws.ie/protected-sites> (07 February 2022)

National Biodiversity Data Centre Map Viewer <http://maps.biodiversityireland.ie/#/Map> (07 February 2022)

FIGURES

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

N



NOTES

1. Extract from Ordnance Survey Discovery Series Mapping Map No. 49, 50, 55 & 56.
2. Ordnance Survey Ireland Licence No. SU 0000719 (c) Ordnance Survey Ireland and Government of Ireland.

LEGEND

- PLANNING APPLICATION AREA (c. 26.6 HECTARES)
- 5km & 15KM RADIUS FROM PLANNING APPLICATION AREA
- SPECIAL AREA OF CONSERVATION (SAC)
- SPECIAL PROTECTION AREA (SPA)

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

00507.00001.USK.AA-Fig 1.Natura 2000 Sites within 15km.dwg

SLR
SLR CONSULTING IRELAND
7 DUNDRUM BUSINESS PARK
WINDY ARBOUR
DUBLIN 14
T: +353-1-2964667
F: +353-1-2964676
www.slrconsulting.com

DUNLAVIN LAND RESTORATION LTD.
STAGE 2 APPROPRIATE ASSESSMENT REPORT

LANDS AT USK TOWNLAND,
KILCULLEN, CO. KILDARE

LOCATION OF PROJECT AND
NATURA 2000 SITES

FIGURE 1

Scale: 1:125,000 @ A3 Date: FEBRUARY 2022

EUROPEAN OFFICES

United Kingdom

AYLESBURY

T: +44 (0)1844 337380

BELFAST

T: +44 (0)28 9073 2493

BRADFORD-ON-AVON

T: +44 (0)1225 309400

BRISTOL

T: +44 (0)117 906 4280

CAMBRIDGE

T: + 44 (0)1223 813805

CARDIFF

T: +44 (0)29 2049 1010

CHELMSFORD

T: +44 (0)1245 392170

EDINBURGH

T: +44 (0)131 335 6830

EXETER

T: + 44 (0)1392 490152

GLASGOW

T: +44 (0)141 353 5037

GUILDFORD

T: +44 (0)1483 889800

LEEDS

T: +44 (0)113 258 0650

LONDON

T: +44 (0)203 691 5810

MAIDSTONE

T: +44 (0)1622 609242

MANCHESTER

T: +44 (0)161 872 7564

NEWCASTLE UPON TYNE

T: +44 (0)191 261 1966

NOTTINGHAM

T: +44 (0)115 964 7280

SHEFFIELD

T: +44 (0)114 245 5153

SHREWSBURY

T: +44 (0)1743 23 9250

STAFFORD

T: +44 (0)1785 241755

STIRLING

T: +44 (0)1786 239900

WORCESTER

T: +44 (0)1905 751310

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

Ireland

DUBLIN

T: + 353 (0)1 296 4667

France

GRENOBLE

T: +33 (0)4 76 70 93 41