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CONSULTANTS IN ENGINEERING, ENVIRONMENTAL SCIENCE & PLANNING

OLDCOURT HISTORICAL LANDFILL MONITORING

APPROPRIATE ASSESSMENT SCREENING REPORT FOR CERTIFICATE OF AUTHORISATION FOR A HISTORICAL LANDFILL AT OLDCOURT, CO. KILKENNY

Prepared for: Kilkenny County Council

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Core House, Pouladuff Road, Cork, T12 D773, Ireland

T: +353 21 4964 133 | E: info@ftco.ie

CORK | DUBLIN | CARLOW

www.fehilytimoney.ie

APPROPRIATE ASSESSMENT SCREENING REPORT FOR CERTIFICATE OF AUTHORISATION FOR HISTORICAL LANDFILL AT OLDCOURT, CO. KILKENNY

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Abstract: This document comprises the Stage One: Appropriate Assessment Screening Report for proposed annual surface water monitoring at the Historical Landfill/Dumping Site at Oldcourt, Co. Kilkenny. Appropriate Assessment is required under Article 6 (3) of the Habitats Directive for any project or plan that may give rise to significant effects on a European (Natura 2000) site and is required to be completed for Certificate of Authorisation applications.

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1. INTRODUCTION

Fehily Timoney and Company (FT) was commissioned by Kilkenny County Council to provide consultancy services in respect of proposed monitoring of the historical landfill at Oldcourt, Co. Kilkenny. This report was prepared in support of an application to the EPA for a Certificate of Authorisation for the site. The proposed project is to implement a surface water monitoring programme at the historical landfill.

An Appropriate Assessment Screening Report has been prepared in respect of the proposed project, as required by Article 6 of Council Directive 92/43/EEC (Habitats Directive).

A screening for Appropriate Assessment of an application for consent for the proposed development shall be carried out by the competent authority or authorities to assess, in view of best scientific knowledge, if the proposed development, individually or in combination with another plan or project is likely to have a significant effect on a European site, in view of the site's conservation objectives.

European sites, as defined in the Planning and Development Act 2000 as amended (the 2000 Act), comprise both Special Protection Areas (SPAs) for birds and (candidate) Special Areas of Conservation (cSACs)/SACs for habitats and other species, and are designated by Member States pursuant to the requirements of Council Directive 79/409/EEC, now Directive 2009/147/EU, on the conservation of wild birds ("the Birds Directive") and the Habitats Directive, respectively.

Article 6(3) of the Habitats Directive envisages a two-stage assessment process, which is implemented into Irish law (with some additional requirements) by the provisions of sections 177U and 177V of the 2000 Act. Screening for AA in accordance with section 177U is the first stage of the AA process ("Stage One"), in which the likelihood of there being a significant effect on a European site is assessed. Plans or projects that are not directly connected with or necessary to the management of a European site, and, either alone or in combination with other plans or projects are not likely to have a significant effect on a European site on the basis of objective scientific information are thereby excluded, or screened out, at this stage of the process. Where, however, the competent authority's screening assessment concludes that there is potential for significant effects, then it is necessary to carry out an Appropriate Assessment (AA) ("Stage Two") for the purposes of Article 6(3) and Section 177V of the 2000 Act and a Natura Impact Statement (NIS) is prepared and submitted to the competent authority. The NIS is the primary document to be taken into account by the competent authority when carrying out AA and it considers whether a plan or project will have an adverse effect on the integrity of a European Site in light of its conservation objectives, and where necessary, draws up mitigation measures to avoid/reduce/minimise negative effects.

The competent authority is required to make an examination, analysis, evaluation, findings, conclusions and a final determination as to whether or not the proposed development would adversely affect the integrity of the relevant European site in view of its conservation objectives. To evaluate the potential effects(s) of the proposed monitoring regime on European sites, all sites located within a 15km radius of the landfill site were considered. Please note that while a 15km buffer is recommended for plans, there is no hard and fast rule for buffer size (DoEHLG, 2009). A 15km buffer was used in line with standard industry practice; however, the potential zone of influence can be considered to extend to European sites located outside the 15km buffer where a potential Source-Pathway-Receptor link exists. In this case no such links were identified.

The following European Sites are located within 15km of the landfill/dumping site:

- River Barrow and River Nore SAC[1] (site code 002162) is located immediately adjacent to the historical landfill site (Instream distance 24m). The water quality monitoring location SW2 is within the SAC.
- River Nore SPA (Site Code 004233) is located approximately 200m south-west of the historical landfill site (instream distance 245m).
- Thomastown Quarry SAC (Site Code 002252) is located approximately 8.5 km north-west of the of the historical landfill site.

1.1 Legislative Requirements

The requirements for an AA are set out in the Habitats Directive 92/43/EEC. Articles 6(3) and 6(4) of this Directive states:

6(3) Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have 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.

6(4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

The statutory agency responsible for European sites is the National Parks and Wildlife Service (NPWS) of the Department of Housing, Local Government and Heritage (DHLGH). In December 2009 'Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government' was published with a minor amendment in February 2010 (DoEHLG, 2009).

This guidance document was prepared jointly by the NPWS and Planning Divisions of DoEHLG (now DHLGH), with input from local authorities. Previously, in 2001, the European Commission issued a guidance document. This guidance document has been updated in the published European Commission (2018) "*Managing Natura 2000 sites the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*". This Appropriate Assessment Screening Report has been prepared in accordance with the relevant Irish and European Commission Guidance.

[1] *At present most SACs in Ireland are currently 'candidate' SACs, and referred to as cSACs. The relevant Statutory Instruments for the cSACs in Ireland have not yet been made, however, these "candidate" sites must still be afforded the same level of protection as if they were SACs as designated in accordance with the EU Habitats Directive.*

1.1.1 Regulatory Context

In 1997, the Habitats Directive was transposed into Irish National Law by the European Communities (Natural Habitats) Regulations, SI 94/1997 (as amended by S.I. 233/1998 & S.I. 378/2005). The European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477/2011) revoked the 1997 Regulations (and amendments) as well as the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010. The purpose of the 2011 Regulations was to address transposition failures identified in the Court of Justice of the European Union (CJEU) judgements.

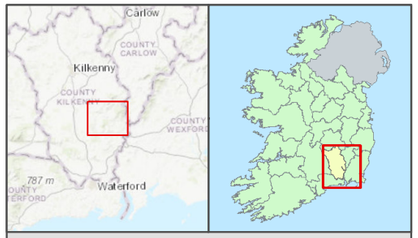
Following additional amendments in 2013 (S.I. 499/2013) and 2015 (S.I. 355/2015) the regulations are now cited as the European Communities (Birds and Natural Habitats) Regulations 2011 to 2015. The Regulations have been prepared to address several judgments of the CJEU against Ireland, notably cases C-418/04 (*Commission v Ireland*) and C-183/05 (*Commission v Ireland*), in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

1.2 Statement of Authority

This report has been prepared by Ben O'Dwyer and reviewed by Jon Keaney. Ben has over 4 years' experience and holds a BSc in Wildlife Biology from Institute of Technology Tralee. Jon has over 15 years' experience and holds a BSc in Applied Ecology from University College Cork and MSc in Ecological Management and Biological Conservation from Queens University Belfast. Jon is a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM).

Map Path: R:\Map Production\2018\P1725\Workspace\Oldcourt Historic Landfill\P1725_Fig2-1_SiteLocation_A3.mxd

Kilometers
0 0.5 1 2



Co. Kilkenny

Legend

Site Boundary

Figure Title	Site Location Plan and Aerial View
Figure No.	1.1
Project	Historical Landfills: Oldcourt
Client	Kilkenny County Council
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2. METHODOLOGY

2.1 Stages of Appropriate Assessment

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures to be addressed in the AA process. Firstly, a project should aim to avoid any negative effects on European sites by identifying possible effects early in the project and should design the project in order to avoid such effects.

There are four stages in an AA, as outlined in the European Commission Guidance document (2001). The following is a brief summary of these steps:

- Stage One - Screening: This stage examines the likely effects of a project either alone or in combination with other projects upon a European Site and considers whether it can be objectively concluded that these effects will not be significant.
- Stage Two - Appropriate Assessment: In this stage, the effect of the project on the integrity of the European site is considered with respect to the conservation objectives of the site and to its structure and function. Mitigation measures should be applied to the point where no adverse effects on the site(s) remain.
- Stage Three - Assessment of Alternative Solutions: Should the Appropriate Assessment determine that adverse effects are likely upon a European site, this stage examines alternative ways of implementing the project that, where possible, avoid these adverse effects.
- Stage Four - Assessment where no alternative solutions exist and where adverse effects remain: Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the Natura site will be necessary. European case law highlights that consideration must be given to alternatives outside the project area in carrying out the IROPI test. It is a rigorous test which projects are generally considered unlikely to pass.

In the preparation of this assessment therefore regard has been given to the Habitats Directive and the European Communities (Birds and Natural Habitats) Regulations 2011, and with reference to the relevant guidance, in particular:

- Assessment of Plans and Projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission 2001.
- *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 2010.
- European Commission (2018). *Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC.* Brussels, 21.11.2018 C (2018) 7621 final.

2.1.1 Assessment of Effects

The first step in the screening process is to develop a list of European sites potentially affected by the proposed development. Each European site is reviewed to establish whether or not the proposed development is likely to have a significant effect on the integrity of the site, as defined by its structure and function, and its conservation objectives.

The qualifying interests of each European site are identified, and the potential threats are summarised into the following categories for the screening process, and described within the screening matrix as follows:

- Direct effects refer to habitat loss or fragmentation arising from land-take requirements for development or agricultural purposes. Direct effects can be as a result of a change in land use or management, such as the removal of agricultural practices that prevent scrub encroachment.
- Indirect and secondary effects do not have a straight-line route between cause and effect, and it is potentially more challenging to ensure that all the possible indirect effects of the plan (or project) – in combination with other plans and projects - have been established. These can arise 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 both an indirect or direct 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 effect, which results in increased movement of vectors (humans, fauna, surface water), and consequently the transfer of alien species from one area to another.
- Disturbance to fauna can arise directly through the loss of habitat (e.g. bat roosts) or indirectly through noise, vibration and increased activity associated with construction and operation.

2.2 Desktop Study

To complete the Screening for Appropriate Assessment certain information on the existing environment is required. A desk study was carried out to collate available information on the site's natural environment. This comprised a review of the following publications, data and datasets:

- Kilkenny County Development Plan 2014-2020
- Draft Kilkenny City and County Development Plan 2021
- National Parks and Wildlife Service (NPWS) website and metadata (www.npws.ie)
- OSI Aerial photography and 1:50,000 mapping
- National Biodiversity Data Centre (NBDC) (on-line map-viewer)
- Environmental Protection Agency (EPA) water quality data

3. BRIEF DESCRIPTION OF THE EXISTING SITE

3.1 Brief Description of the Existing Site

The site is located approximately 1 km east of the town of Inistioge, Co. Kilkenny. The site occupies 0.6 hectares. The site was used by Kilkenny County Council for the disposal of municipal waste. The period of waste disposal activities at the site is unknown. Anecdotally it is believed that waste was tipped from the roadside down the steep slope that forms the upper perimeter of a small valley. The site is currently overgrown with vegetation and trees.

The site is bounded to the north, east and west by a local road, to the south-east by a privately-owned field used for grazing livestock and to the south by a council depot/stock yard. The surrounding lands to the north, east and west are predominantly agricultural with scattered one-off housing. The regional road R700 is located to the south of the site, beyond which is an area forestry between the R700 and the River Nore.

The nearest open waterbody is the Woodstock Park stream, which according to the EPA river network database, flows from the north-east, entering the north-eastern corner of the site, flowing west and turning to flow south-west into the River Nore approximately 245 m southwest of the site boundary.

However, during the site walkover, it was observed that the Woodstock Park stream had been diverted. The stream flows from the north-east and follows the route of the local road beyond the northern site boundary, exiting the site to the south-west into the neighbouring land. The stream was shallow at the time of the site walkover. However, there was evidence that during periods of higher precipitation leading to higher water levels, the modified route of the stream would most likely overflow and follow the natural route indicated on the EPA river network map.

The site is immediately adjacent to, and c. 25m upstream of the River Barrow and River Nore SAC (002162). The River Nore SPA (004233) is located. 200m southwest, and c. 245m downstream of the site.

4. Proposed Monitoring

4.1 Risk Classification and Proposed Monitoring

It is proposed to undertake annual surface water monitoring at previously established locations on the Woodstock Park Stream, upstream and downstream of the historic landfill site to detect whether any changes in the surface water baseline determined during Tier 2 and Tier 3 investigations occurs.

The proposed annual monitoring will comprise grab sampling and obtaining readings from a handheld water quality meter. No equipment or infrastructure of any kind is proposed to be installed at the site.

The Tier 3 investigation confirmed the historic landfill site to be Low Risk (Class C). The highest risk identified was the potential for migration of leachate from the site to the adjacent Woodstock Park stream. However, the waste has been identified as inert and hence the risk of leachate migration to the stream is low.

Low-risk sites are not considered to pose a significant risk to the environment or human health. The Tier III ERA Report therefore recommended that this site can proceed with a Certificate of Authorisation application.

It is recommended that surface water monitoring be conducted annually at locations on the Woodstock Park Stream in accordance with parameters listed in Table 1. Monitoring locations are SW1 (upstream) at ITM 664960 637541 and SW 2 (downstream) at ITM 664802 637370.

Table 1: Parameters for Monitoring of Surface Water

Monitoring Parameter[2]	Frequency	Surface Water	Location
Temperature	Annual	✓	SW1 SW2
Dissolved Oxygen		✓	
pH		✓	
Electrical Conductivity		✓	
Total suspended solids		✓	
Total dissolved solids		✓	
Ammonia (as N)		✓	
Total oxidized nitrogen (as N)		✓	
Total organic carbon		✓	
Biochemical Oxygen Demand		✓	
Chemical Oxygen Demand		✓	
Metals[3]		✓	
Total Alkalinity (as $CaCO_3$)		✓	

[2] Tables D.1 and D.2 of the EPA Landfill Monitoring manual recommend guideline minimum reporting values for parameters.

[3] Metals for analysis should include: calcium, magnesium, sodium, potassium, iron, manganese, cadmium, chromium (total), copper, nickel, lead, zinc, arsenic, boron and mercury.

Monitoring Parameter[2]	Frequency	Surface Water	Location
Sulphate		✓	
Chloride		✓	
Molybdate Reactive Phosphorous		✓	
Cyanide (Total)		✓	
Fluoride		✓	

5. STAGE ONE – SCREENING REPORT

5.1 Brief Description of the European Sites within 15 km of the Development

The following three European Sites are located within 15km of the historical landfill site:

- River Barrow and River Nore SAC (site code 002162) is located immediately adjacent to the historical landfill site (Instream distance 24m). The water quality monitoring location SW2 is within the SAC.
- River Nore SPA (Site Code 004233) is located approximately 200m south-west of the historical landfill site (instream distance 245m).
- Thomastown Quarry SAC (Site Code 002252) is located approximately 8.5 km north-west of the of the historical landfill site.

Surface water monitoring point SW2 is located within the SAC downstream of the historical landfill site. It is located at ITM 664802 637370 immediately upstream of the bridge to the south-west of the landfill site on the R700 regional road.

The River Barrow and River Nore SAC (002162) and River Nore SPA (004233) are connected hydrologically to the historical landfill site via the Woodstock Park stream. This watercourse has been diverted to run along the north-western boundary of the site, however evidence was observed on site indicating the stream deviates from this course and re-establishes its natural path through the centre of the site when flow volumes increase.

No hydrological or hydrogeological connections exist between Thomastown Quarry SAC (002252) and the historical landfill site.

Full site synopses are available on the NPWS website via the protected sites portal: (https://www.npws.ie/protected-sites).

The qualifying interests of the SACs and special conservation interest of the SPA within 15 km of the historical landfill site at Oldcourt, Co. Kilkenny are listed in Table 2:

Table 2: European Sites within 15 km of Oldcourt Historical Landfill Site

European Site	Qualifying Interests
River Barrow and River Nore SAC (002162)	1016 Desmoulin's whorl snail *Vertigo moulinsiana;* 1029 Freshwater pearl mussel *Margaritifera margaritifera;* 1092 White-clawed crayfish *Austropotamobius pallipes;* 1095 Sea lamprey *Petromyzon marinus;* 1096 Brook lamprey *Lampetra planeri;* 1099 River lamprey *Lampetra fluviatilis;* 1103 Twaite shad *Alosa fallax* 1106 Atlantic salmon (*Salmo salar*) (only in fresh water); 1130 Estuaries; 1140 Mudflats and sandflats not covered by seawater at low tide; 1310 *Salicornia* and other annuals colonizing mud and sand; 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); 1355 Otter *Lutra lutra;* 1410 Mediterranean salt meadows (*Juncetalia maritimi*); 1421 Killarney fern *Trichomanes speciosum;* 1990 Nore freshwater pearl mussel *Margaritifera durrovensis;* 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation; 4030 European dry heaths; 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels; 7220 * Petrifying springs with tufa formation (*Cratoneurion*); 91A0 Old sessile oak woods with *Ilex* and

European Site	Qualifying Interests
	Blechnum in the British Isles; 91E0 * Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae)*
River Nore SPA (004233)	A229 Kingfisher *Alcedo atthis*
Thomastown Quarry SAC (002252)	Petrifying springs with tufa formation (Cratoneurion) [7220]

5.2 Screening Assessment Criteria

Throughout this section the line items in *italics* refer to suggested instructions for information to be contained in a screening assessment, and in an appropriate assessment from the guidance document '*Assessment of Plans and Projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*', (European Commission, 2001). The standard 'Screening Matrix' and 'Finding of No Significant Effects Report Matrix' in Annex 2 of this guidance document are also followed.

As set out in NPWS guidance (DoEHLG, 2009), the task of establishing whether a plan or project is likely to have an effect on a European site(s) is based on an evaluation using available information and data (e.g. water quality data), supplemented as necessary by local site information and ecological surveys. This results in a determination by the competent authority as to whether there may be a significant effect on the designated site. A precautionary approach is required.

Some examples given in the NPWS guidance (DoEHLG, 2009) of effects that are likely to be significant are:

1. Any effect on an Annex I habitat,
2. A reduction in the area of a habitat of conservation interest in a European site or a reduction in the area of a European site,
3. Direct or indirect damage to the physical quality of the environment (e.g. water quality and supply, soil compaction) in the European site,
4. Serious or ongoing disturbance to species or habitats for which the European site is selected (e.g. increased noise, illumination and human activity),
5. Direct or indirect damage to the size, characteristics or reproductive ability of populations in the European site,
6. Interference with mitigation measures put in place for other plans or projects.

5.3 Screening Matrix

Assessment Criteria	Discussion of Potential Effects
Describe any likely direct, indirect or secondary impacts [effects] of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of: ▪ *Size and scale;* ▪ *Land-take;* ▪ *Distance from Natura 2000 site or key features of the site;* ▪ *Resource requirements;* ▪ *Emissions;* ▪ *Excavation requirements;* ▪ *Transportation requirements;* ▪ *Duration of construction, operation etc.;* ▪ *Other.*	**Size and scale** **Potential effects:** *None* Proposed activities are limited to annual surface water monitoring for the parameters listed in Table 1. Sampling will be undertaken at two locations along the Woodstock Park stream, upstream and downstream of the historic landfill site. No effects will occur on any European site due to size and scale. **Land-take** **Potential Effects:** *None.* The proposed monitoring regime will not give rise to any land take from European sites. **Distance from Natura 2000 (European) sites** **Potential Effects:** *None.* While the monitoring location SW2 is within the River Barrow and River Nore SAC, proposed activities are limited to brief human presence for the purpose of obtaining water samples and physico-chemical readings once per year. Annual monitoring will continue for the duration to be specified in the certificate of authorisation. As such, while part of the proposed activity is within the River Barrow and River Nore SAC, the benign nature and limited scope of the activity means no likely significant effects will occur. **Resource requirements** **Potential Effects:** *None* There will be no resource requirements from any European site as a result of the proposed monitoring regime. Therefore, no direct or indirect likely significant effects on any European site will occur. **Emissions** **Potential Effects:** *None*

Assessment Criteria	Discussion of Potential Effects
	The proposed sampling activities will not generate any emissions which could enter the River Barrow and River Nore SAC and River Nore SPA. **Excavation requirements** **Potential Effects:** *None* There will be no excavation requirements from any European site as a result of the proposed monitoring regime. **Transportation requirements** **Potential Effects:** *None.* Transport to and from the historical landfill will be by car via existing roads. The sampling locations will be accessed on foot using existing access routes. As such no likely significant effects will occur as a result of transportation requirements. **Duration of Operation** **Potential Effects:** *None.* Annual monitoring will continue for the duration to be specified in the certificate of authorisation. It is considered possible that annual surface water monitoring may be required to be carried out for the foreseeable future. Due to the benign nature and limited scope of the activity, no likely significant effects will occur. Sampling will be limited to one round per year which can be completed in under an hour. **Cumulative Effects** **Potential Effects:** *None* A planning search carried out though the Kilkenny Co. Council planning portal (https://planning.kilkennycoco.ie/SearchExact.aspx) on 15th January 2021 indicated that proposed and permitted developments in the townlands of Kilcross and Oldcourt which overlap the historical landfill site were limited to one-off residential and agricultural building developments. Considering the benign nature and limited scope of the proposed monitoring regime, no likely significant cumulative effects are predicted.
Describe any likely changes to the site arising as a result of: ▪ *Reduction of habitat area;*	There will be no direct reduction in habitat area or habitat fragmentation within any European site as a result of the proposed monitoring.

Assessment Criteria	Discussion of Potential Effects
▪ *Disturbance of key species;* ▪ *Habitat or species fragmentation;* ▪ *Reduction in species density;* ▪ *Changes in key indicators of conservation value;* ▪ *Climate change.*	Limited disturbance of key species such as Otter could occur as a result of the proposed monitoring, however this will not result in likely significant effects due to the non-invasive nature, brevity and infrequency of sampling. No reduction in the density of key species will occur as a result of the proposed monitoring. No changes in key indicators of conservation value will occur as a result of the proposed monitoring.
Describe any likely impacts [effects] on the Natura 2000 site as a whole in terms of: ▪ *Interference with the key relationships that define the structure of the site;* ▪ *Interference with key relationships that define the function of the site.*	No effects which could interfere with the key relationships that define the structure and/or function of the site will occur as a result of the proposed monitoring.
Provide indicators of significance as a result of the identification of effects set out above in terms of: ▪ *loss,* ▪ *fragmentation,* ▪ *disruption,* ▪ *disturbance,* ▪ *change to key elements of the site (e.g. water quality etc.).*	No habitat loss, fragmentation, disruption or changes to key elements of any European site will occur as a result of the proposed monitoring. As noted above, limited disturbance to Otter (a qualifying interest for the River Barrow and River Nore SAC) could occur as a result of the proposed monitoring, however, due to the non-invasive nature, brevity and infrequency of sampling, any such effects are not predicted to be significant.
Describe from the above those elements of the project or plan, or combination of elements, where the above impacts [effects] are likely to be significant or where the scale of magnitude of impacts [effects] is not known.	No effects of unknown scale or magnitude, either alone or in-combination with other projects or plans will occur as a result of the proposed monitoring.

5.4 Stage One Screening Conclusion

It is concluded beyond reasonable scientific doubt that there are not likely to be significant effects from the proposed activity on the European sites identified for consideration (or any other European site beyond 15km) either alone or in combination with other plans or projects.

No effects on the European Sites listed below are predicted. Therefore, the following European sites have been 'screened out' within the Stage 1: Appropriate Assessment Screening Report:

1. River Barrow and River Nore SAC (site code 002162)
2. River Nore SPA (Site Code 004233)
3. Thomastown Quarry SAC (Site Code 002252)

6. REFERENCES

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. Revised in 2010.

EC, 2018. Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission Brussels, 21.11.2018 C (2018) 7621 final.

EC, 2001. Assessment of Plans and Projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission 2001.

EPA, 2003. Landfill Manuals - Landfill Monitoring, 2nd Edition. Environmental Protection Agency, Ireland.

Fehily Timoney, 2020. Tier 3 Environmental Risk Assessment – Historic Landfill at Oldcourt, Co. Kilkenny. Prepared for Kilkenny County Council.

Kilkenny County Council, 2014. Kilkenny County Development Plan 2014-2020 [online] available at: https://www.kilkennycoco.ie/eng/Services/Planning/Development-Plans/Development_Plans_2014-2020/Kilkenny-County-Development-Plan-2014-2020.html

Kilkenny County Council, 2020. Kilkenny County Council. Kilkenny City and County Development Plan 2021 [online] available at: https://www.kilkennycoco.ie/eng/Services/Planning/Development-Plans/City-and-County-Development-Plan-2021/

FEHILY TIMONEY

CONSULTANTS IN ENGINEERING, ENVIRONMENTAL SCIENCE & PLANNING

www.fehilytimoney.ie

CORK OFFICE
Core House
Pouladuff Road,
Cork, T12 D773,
Ireland
+353 21 496 4133

Dublin Office
J5 Plaza,
North Park Business Park,
North Road, Dublin 11, D11 PXT0,
Ireland
+353 1 658 3500

Carlow Office
Unit 6, Bagenalstown Industrial Park, Royal Oak Road,
Muine Bheag,
Co. Carlow, R21 XA00,
Ireland
+353 59 972 3800

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