

Appropriate Assessment Screening Template

Part 1

APPROPRIATE ASSESSMENT SCREENING REPORT (STAGE 1)

SECTION A: Summary Description Of Waste Activity & Receiving Environment

Description of Waste Activity and associated activities:

A.1	Authorisation Application Ref. No.:	S22-02471
A.2	Size(ha) of site:	0.244
A.3	Proposed activity:	Remediation of historic landfill at Knocknacarriga, Co. Limerick
A.4	Brief Description of Site Operation	<p>Limerick Co Council operated a landfill site at Knocknacarriga from 1986 to 1988.</p> <p>The area of the waste body is estimated at 2,440 m²</p> <p>The volume of the waste body is estimated at 18,160 m³ (approx 12,000 tonnes)</p> <p>The main waste body (14,960m³) is located in a former quarry with an average depth of 11m</p> <p><u>Site investigations found the following:</u> The waste is non-hazardous, domestic in nature with no industrial waste or large objects found. The waste is highly decomposed & contains a very high fraction of plastic with very small amounts of textiles, glass, timber and metal. With the exception of a small number of newspaper fragments, there was no organics, paper or cardboard.</p> <p>The capping layer consists of 200 -300 mm of good quality free draining topsoil sitting directly on the waste body. The capping layer is now typically 0.5 metre higher than the existing field levels. The fraction of waste to inert backfill material is very high.</p>

		<p>A 100 mm diameter pipe was laid from the floor of the old quarry to the drainage ditch which flows along the northern perimeter of the site.</p> <p><i>(Section 4 Tier 2 HL report)</i></p>
A.5A	Lifetime tonnage OR Annual operational tonnage of proposed activity:	N/A
A.5B	Has the site previously been in-filled? If so provide an estimate of the quantity of waste disposed at the site i.e. from AER details	Yes - Estimate 18,160m ³ (approx. 12,000 tonnes) – <i>Section 4.1 Tier 2 HL Report</i>
A.6	Is the application accompanied by EIS and/or Ecological Assessment report – If so the outcomes can be used to answer the questions below	No
A.7	Describe existing (or proposed) pollution control measures & their effectiveness <i>(Based on previous audit findings and/or local knowledge)</i>	<p>The capping layer consists of 200 -300 mm of good quality free draining topsoil sitting directly on the waste body. The capping layer is now is typically 0.5 metre higher than the existing field levels.</p> <p>The fraction of waste to inert backfill material was very high in all 3 trial holes excavated.</p> <p><i>(Section 4 Tier 2 HL report)</i></p>

Receiving Environment

A.8	Receiving Environment	<p>The waste body is located on side slopes of Knocknacarriga Hill which is now used as agricultural grassland.</p> <p>The waste body is located between 68 and 82 m AOD.</p> <p>The subsoils surrounding the waste body are shallow with bedrock generally within 0.8 to 1.0 metres of the surface.</p> <p>The soil sample taken on the high ground to the south of</p>
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		<p>the waste body is classified as a dark reddish-brown silty very sand medium GRAVEL. The permeability for the soil was 1.087 E-09 m/s.</p> <p>The soil sample taken on the lower ground to the north of the site contains a higher CLAY content, The soils appear to be reasonably well drained. The soils are classified as dark reddish brown, slightly gravelly sandy SILT/CLAY.</p> <p>The waste body is in direct contact with the underlying limestone bedrock.</p> <p>The GSI geological map indicates that the site is underlain by the Ballysteen Formation which is described as fossiliferous dark-grey muddy limestone. These muddy limestones are not generally liable to karstification & no karst features were detected during the geophysical survey of the site.</p> <p>There are no rivers or streams within 500 metres of the site. There is a drainage ditch which runs along the northern perimeter of the site parallel with the regional road. (Section 4 Tier 2 HL report)</p> <p>The site is not located in a flood risk zone</p> <p>The site is located approx. 630m from the Lower River Shannon SAC (0021656)</p>
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SECTION B: Identification Of The Relevant Natura 200 Site(s)

Table 1: Natura 2000 Site(s) within 15km of Applicant Site

Natura 2000 Sites ¹	Distance to Applicant Site (km) By land & by water	Is this site relevant to your assessment – give reasons to justify your decision (Refer to Note below)
Lower River Shannon SAC – Site Code 002165	Approx.. 630 m North and 1.48km West	No- any discharge from the site has to travel at least 1km before reaching the River Shannon. A minimal discharge into a dry drainage ditch was observed during our site visits on 21/11/18 (approx. 0.25l/min Note: the discharge in May 2013 was approx. 0.5l/min).
Slieve Felim SPA	3.5 Km North	No, it is located upstream and no connectivity.
River Suir SAC	13km East	No - No connectivity

Note: In deciding which sites are relevant to your assessment you need to justify your selection on the basis of; (for example) scale of your project, hydrological connectivity and catchment area. Only these sites will form the basis of your assessment and will be brought forward to section C.

SECTION C: Conservation Objectives of The Natura 2000 Site(s) listed in Table 1

Table 2: List of Habitats and Species /Birds listed in Conservation Objectives of the Natura 2000 Sites identified as relevant in Table 1

Code	Annex I habitat and Annex II species or Annex I birds

¹ Natura 2000 Site details are available on <http://webgis.npws.ie/npwsviewer/> or maybe obtained from internal mapping systems.

SECTION D: Assessment Of Likely Direct, Indirect And Cumulative Effects

Table 3: Potential Direct & Indirect Impacts Arising

General Considerations		Y/N and Comment
D.1	Is the historic landfill located within or partly within a Natura 2000 Site or does it discharge to a Natura 2000 Site?	No
D.2	Is the historic landfill located within 15km of a Natura 2000 Site?	Yes
D.3	Is the historic landfill located within a flood zone? <i>If yes, consider whether there is potential for construction or operational related impacts on water quality in the European Site; consider whether the proposed waste facility increases flood risk elsewhere in the catchment; or increases the risk of stormwater surges downstream.</i> Note: Flood maps are available on www.floodmaps.ie or www.cfram.ie . Some local authorities may have access to JBA predictive flood maps	No
D.4A	Does the proposed historic landfill remediation involve the removal/ excavation of significant amounts of topsoil within approx. 200m of a European Site?	No
D.4B	Does the proposed historic landfill remediation involve infilling or raising of ground levels within approx. 200m of the boundary of any European Site.	No
D.4C	Is there a risk of introducing invasive alien species (IAS) to the site? Note: Details of IAS can be found via http://www.biodiversityireland.ie/projects/invasive-species/	No
D.5A	Does the proposed historic landfill remediation involve development of drainage systems? <i>If yes, could this cause hydrological and hydrogeological changes to relevant European Sites e.g. drying out of wetland or woodland habitats within an SAC</i>	No
D.5B	Would the proposed historic landfill remediation involve dredging (construction or ongoing maintenance related)?	No
D.6A	Does the existing wastewater treatment system have the capacity to treat any additional loading?	NA
D.6B	Does the proposed historic landfill remediation involve installation of wastewater treatment systems; percolation areas; septic tanks within	NA

General Considerations		Y/N and Comment
	approximately 200m of the boundary of a European site. Note: Distances greater than 200m may have to be looked at depending on the site.	
D.7	Would the proposed historic landfill remediation result in direct surface water or other discharge to water bodies (i.e. to groundwater) <u>in or feeding into</u> a European Site? <i>Would it result in additional storm flows into a combined sewer and subsequently into a combined sewer overflow (CSO), resulting in increased frequency, quantity and/or duration of overflow from the CSO to watercourses feeding into the European sites?</i>	No- any discharge from the site has to travel at least 1km before reaching the River Shannon. A minimal discharge into a dry drainage ditch was observed during our site visits on 21/11/18 (approx. 0.25l/min Note: the discharge in May 2013 was approx. 0.5l/min).
D.8	Does the proposed historic landfill remediation involve abstraction from surface-water or groundwater within approx. 1km of the boundary of a European site. Note: Distances greater than 1km may have to be looked at, as well the proposed quantity to be abstracted & other abstraction sources in the area.	No
D.9	Will the proposed historic landfill remediation have any air emissions? <i>Particularly relevant were the proposed facility is located near a SAC with dry heaths/hogs/mountains</i>	No
D.10	Could the proposed historic landfill remediation result in increased levels of noise disturbance?	No
D.11	Could the proposed historic landfill remediation result in light disturbance?	No
D.12	Could the proposed historic landfill remediation give rise to direct loss of habitats (e.g. woodlands, grassland, wetlands or riverbanks) for which the European Site is designated, or other habitats supporting the European Site and associated QI/special conservation interests?	No
D.13	Could the proposed historic landfill remediation result in destruction of nesting/roosting/dens/holt/feeding grounds?	No
D.14	Could the proposed historic landfill remediation give rise to increased human usage/access to a European Site, which could potentially cause deterioration of sites?	No
D.15	Does the proposed historic landfill remediation involve storage and subsequent potential for spillages of oils, chemicals or organic wastes within the potential impact zone of a European Site? Note: <i>The impact zone will depend on the nature of the European Sites and associated qualifying interests.</i>	No

Potential Cumulative Impacts Arising from the Proposed Waste Authorisation

Table 4: Potential Cumulative Impacts Arising from the Proposed Waste Authorisation

Cumulative impacts		Y/N and Comment
D.16	Are there other plans or projects which, in combination with the proposed development, are likely to give rise to any cumulative effects? <i>If yes, please list</i>	No
D.17	What is the potential for cumulative impacts as a result of other known projects and/or plans permitted or proposed within the vicinity	None

Table 5: Potential impact on Conservation Objectives (list all Conservation objectives)

Annex 1 habitat/Annex II species/Birds from table 2	Context relevant to development	Potential Impacts Direct/Indirect/Cumulative

SECTION E: Potential Significant Effects on European Sites from the Proposed Project

This section summarises the likely significant effects from the waste facility (Table 5) and summarises the potential for impact as a result (Table 6).

Table 6: Nature of Significant Impacts on Conservation Objectives (list only the ones potentially significant)

Annex 1 habitat/Annex II species from table 2	Likely Effect (Identified in Table 5)	Nature of the Impact i.e. Direct, Indirect, Temporary or Permanent

Must request a NIS:

1. If you have filled in table 6 and identified conservation objectives potentially negatively impacted by the project.
2. If you are starting to mitigate, if the screening is becoming too complicated, if you have doubts

SECTION F: Screening Conclusion And Statement

The findings and conclusions of this screening process are documented, with the necessary supporting evidence and objective criteria. This is of particular importance in cases where the AA process ends at the screening stage because the conclusion is that no significant effects are likely (need to complete Section I in this case).

Screening concludes that : (Tick [v] the appropriate box A or B)	
Natura Impact Statement is <u>not required</u> because there is no potential for significant effects. This project is said to screen out for Appropriate Assessment	v
Natura Impact Statement is <u>required</u> because significant effects are certain, likely or uncertain.	

Screening Statement

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SECTION G: Finding of No Significant Impacts

Name of Project or Plan	e.g. AA Screening template for Southern Waste Region
Name and Location of European Site(s) (potentially impacted)	Lower Shannon SAC
Description of the Project or Plan	Remediation of historic landfill at Knocknacarriga, Co. Limerick
Are there other Projects or Plans that together with the Project or Plan being assessed could affect the site?	No
The Assessment of Significance of Effects	
Describe how the Project or Plan (alone or in-combination) is likely to affect the European site	No- any discharge from the site has to travel at least 1km before reaching the River Shannon. A minimal discharge into a dry drainage ditch was observed during our site visits on 21/11/18 (approx. 0.25l/min Note: the discharge in May 2013 was approx. 0.5l/min).
Explain why these effects are not considered significant	The recommended remediation option does not involve the development of drainage systems. The placement of a 500mm inert capping layer will potentially reduce the volume of the discharge and the level of contaminants.
List of Agencies consulted: (if any)	
Response to consultation	
Data Collected to Carry Out the Assessment	
Who carried out the assessment?	Carol Sweetnam, Planning & Environmental Services, Limerick City and County Council
Sources of data	Historic Landfill Tier 1 – Tier 3 assessment reports, Limerick City and County Council map viewer, EPA maps, www.npws.ie
Level of Assessment completed	Historic Landfill Tier 1 – Tier 3 assessment reports, desk-top study and site inspection on 22/11/18, analysis of sample from discharge from pipe
Where can the full results of the assessment be accessed and viewed	File ref: 19/24/(18)
Overall Conclusion	Screened out

Name:			
Position:	Executive Scientist	Date:	17/01/19

SECTION H: Consultation Undertaken as Part of this AA Screening

Note: Consultation required is to be determined on a case by case basis, reflecting the sensitivity of the site involved and the activity proposed.

The following organisations were contacted to gather information and seek comment on the proposal.

ORGANISATION	Y/N	NOTES ON CONSULTAITON
Development Applications Unit Department of Arts, Heritage and Gaeltacht	N	
EPA	Y	EPA maps
Office of Public Works	Y	ww.floodmaps.ie
Local Authority (specify section)	Y	Planning & Environmental Services
Other (including public if relevant) i.e. NPWS, Inland Fisheries	Y	www.nwps.ie

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