



Proposed Amendment to waste
acceptance parameter limits

Integrated Materials Solutions
(W0129-02) , Naul, Co. Dublin

Screening Statement for
Appropriate Assessment

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Doherty Environmental

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Integrated Materials Solutions, Naul, Co. Dublin

Screening Statement in support of Appropriate Assessment

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Table of Contents

<u>1.0 INTRODUCTION</u>	<u>1</u>
<u>2.0 SCREENING METHODOLOGY</u>	<u>1</u>
<u>3.0 PROJECT DESCRIPTION</u>	<u>4</u>
<u>4.0 IDENTIFICATION OF EUROPEAN SITES WITHIN THE ZONE OF INFLUENCE OF THE PROJECT</u>	<u>5</u>
<u>5.0 DESCRIPTION OF ELEMENTS OF THE PROJECT LIKELY TO GIVE RISE TO IMPACTS TO FEATURES OF INTEREST</u>	<u>13</u>
5.1 IN-COMBINATION EFFECTS	13
5.2 POTENTIAL EFFECTS TO CONSERVATION OBJECTIVES	13
<u>6.0 ASSESSMENT OF THE PROJECTS POTENTIAL TO RESULT IN LIKELY SIGNIFICANT EFFECTS</u>	<u>15</u>
<u>7.0 SCREENING CONCLUSION</u>	<u>18</u>
<u>REFERENCES</u>	<u>19</u>

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1.0 INTRODUCTION

Doherty Environmental Consultants (DEC) Ltd. has been commissioned by Integrated Materials Solutions Limited Partnership. to undertake a Screening Statement in support of an Appropriate Assessment (AA), under Article 6 of the EU Habitats Directive, for a proposal to amend the Waste Acceptance Criteria (WAC) Limits at IMS Landfill (W0129-02), Fingal, Co. Dublin. Figure 1.1 shows the location of project site. A Hydrogeological Risk Assessment (HRA) has been prepared by Golder Associates (Golder, September 2018) to assess the potential risks of the proposed amendment and the HRA has been used to inform this Screening Statement.

This Screening for Appropriate Assessment forms Stage 1 of the Habitats Directive Assessment process and is being undertaken in order to comply with the requirements of the Habitats Directive Article 6(3). This Screening Statement has been prepared for the competent authority to facilitate them in determining whether the proposed project will have the potential (alone or in-combination with other projects) to result in likely significant effects to European Sites.

2.0 SCREENING METHODOLOGY

The function of the Screening Assessment is to identify whether or not the proposal will have a likely significant effect on European Sites. In this context “likely” refers to the presence of doubt with regard to the absence of significant effects (ECJ case C-127/02) and “significant” means not trivial or inconsequential but an effect that has the potential to undermine the site’s conservation objectives (English Nature, 1999; ECJ case C-127/02). In other words any effect that compromises the functioning and viability of a site and interferes with achieving the conservation objectives for the site would constitute a significant effect.

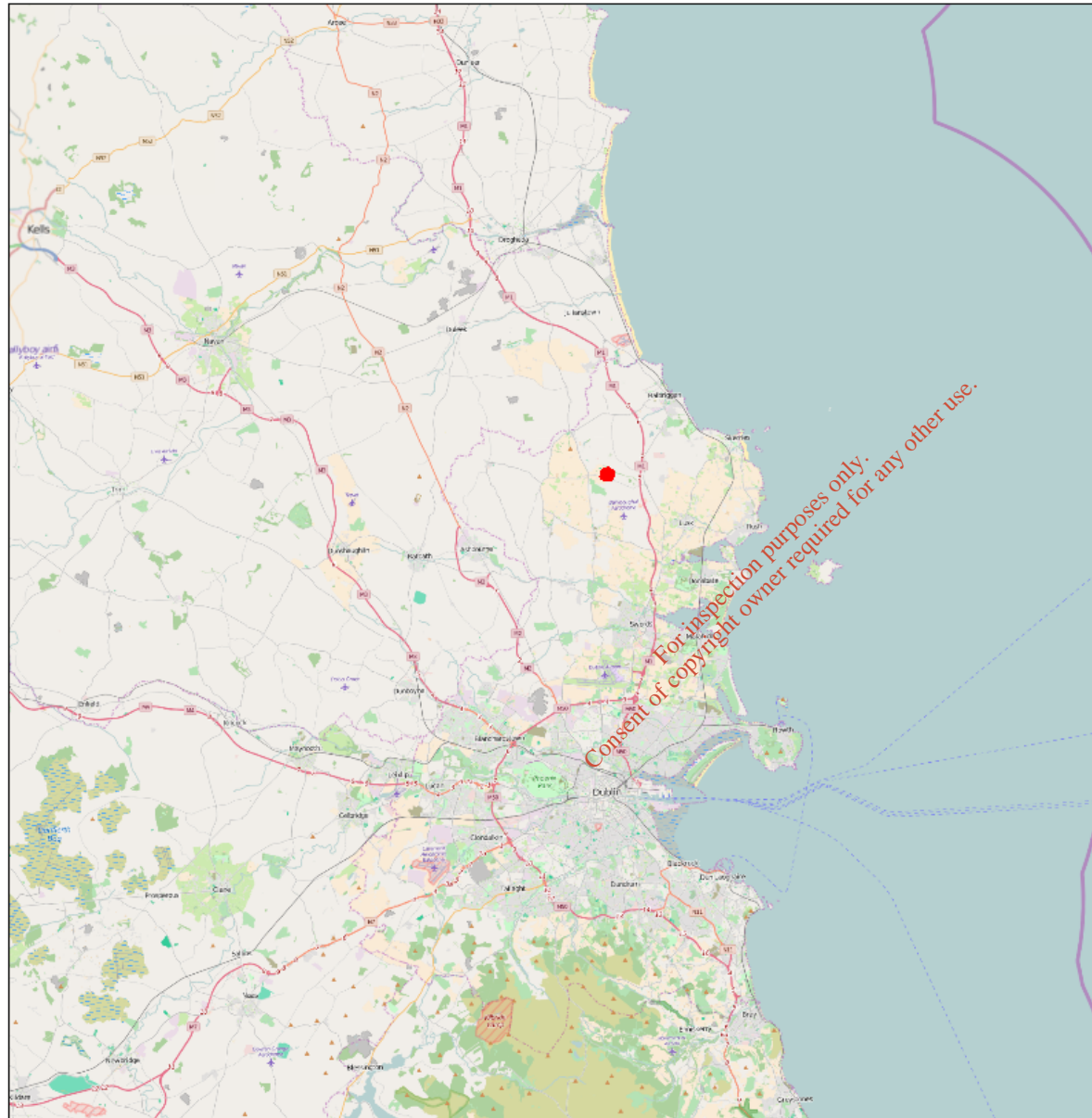
The nature of the likely interactions between the proposed project at IMS and the integrity of a European Site will depend upon whether or not European Sites occur within the zone of influence of the project site. The potential for likely significant effects to European Sites that do occur within the zone of influence of the project site will depend upon the project’s potential to result in ecological effects and the sensitivity of European Site qualifying features to such effects.

This Screening for Appropriate Assessment has been undertaken with reference to respective National and European guidance documents: Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities (DEHLG 2010) and *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* and recent European and National case law informing the approach to the Habitats Directive Assessment process. The following guidance documents were also of relevance during this Screening Assessment:

- A guide for competent authorities. Environment and Heritage Service, Sept 2002. Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2010). DEHLG.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/42/EED. European Commission (2001).
- Managing Natura 2000 Sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC. European commission (2000). (To be referred to as MN 2000).

The European Commission (2001) Guidelines outline the stages involved in undertaking a Screening Assessment of a project that has the potential to have likely significant effects on European Sites. The methodology adopted for this Screening Assessment is informed by these guidelines and was undertaken in the following stages:


1. Define the project and determine whether it is necessary for the conservation management of European Sites;
2. Identify European Sites occurring within the zone of influence of the project;
3. Screen the European Sites occurring within the zone of influence of the project against established assessment criteria to determine if they are at risk of experiencing likely significant effects as a result of the project; and
4. Identify other plans or projects that, in combination with the project, have the potential to affect European Sites.

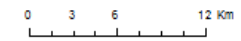


Murphy's Quarry

Figure 1.1

Site Location

 SiteBoundary



Drawn By	PD
Date	10/09/2018
Data Source	Bing

3.0 PROJECT DESCRIPTION

The IMS Landfill site accepts primarily construction type wastes for placement within engineered landfill cells. The cells are constructed with a clay liner which must meet a minimum permeability of 10^{-7} m/s and they are constructed and approved under Specified Engineering Works and Construction Quality Assurance reports which are submitted to the EPA for approval. The site infrastructure and waste acceptance procedures prevent any harmful emissions to the environment and the site operates a comprehensive monitoring network including surface water, groundwater, leachate, noise and dust monitoring and reporting.

The project comprises a proposal to increase the WAC limits at the IMS landfill sites. The limits are set under EC Council Decision 2003/33/EC for a number of parameters associated with waste and the current proposal is to increase by three times the limits for sulphate, chloride, antimony, selenium, molybdenum, arsenic and Total Dissolved Solids (TDS); and a two times increase for total organic carbon (TOC). In order to do this, it needs to be demonstrated to the competent authority (the EPA) that the predicted emissions from the Site will present no additional risk to the environment, to allow the EPA to determine if a derogation can be applied to these parameters for the specified waste stream (Soil and Stone and Dredging Spoil).

A Hydrogeological Risk Assessment (HRA) has been prepared by Golder Associates (Golder, September 2018) to assess the potential risks of the proposed amendment and the HRA has been used to inform this Screening Statement. The HRA considered the potential presence of a range of parameters that included both hazardous substances and non-hazardous pollutants that could be present in the waste and any leachate produced at the Site, and that potential for leachate to migrate to the surrounding water environment. The assessment concluded that the risk to groundwater from the proposed increase in limits is acceptable as none of the parameters considered breached the Environmental Assessment Limits at either the 50th or 95th percentiles.

The proposal does not require any amendment to any site emission or waste volume as permitted under the site's Waste Licence W0129-02.

4.0 IDENTIFICATION OF EUROPEAN SITES WITHIN THE ZONE OF INFLUENCE OF THE PROJECT

Current guidance on undertaking EU Habitats Directive Article 6 Assessments advises that all European Sites occurring within a 15km radius of a project site should first be included within a Screening Assessment (Scott Wilson et al., 2006; DEHLG, 2010). Eight European Sites, comprising of five SPAs and three SACs occur within the surrounding 15km radius of the site. These European Sites are shown and listed on Figures 5.1 & 5.2.

In addition to the European Sites occurring within a 15km area of the project site the DEHLG 2010 guidelines on Appropriate Assessment of Plans and Projects in Ireland also advise that where the potential exists for a hydrological pathway to occur between the project site and European Sites beyond the 15km distance, then these sites should also be included as part of the Screening Assessment. However, as there are no connections to other European Sites beyond a 15km radius of the project site, it is adequate to restrict this Screening to those sites occurring within the 15km radius.

The next step of the Screening Assessment is to identify which, if any of these European Sites, occur within the zone of influence of the project. As the nearest European Site (Rogerstown Estuary SAC & SPA) is located at a remote distance (approximately 7.5km) from the project site, the project will not have the potential to result in direct impacts to European Sites. Thus this Screening exercise focuses on investigating whether the proposed discharges will have the potential to result in indirect effects to European Sites or affect mobile species associated with European Sites beyond the boundaries of their designated conservation areas.

A source-pathway-receptor model has been used to establish which European Sites could occur within the zone of influence of potential indirect impacts. Under such a model the project, as described above, represents the source.

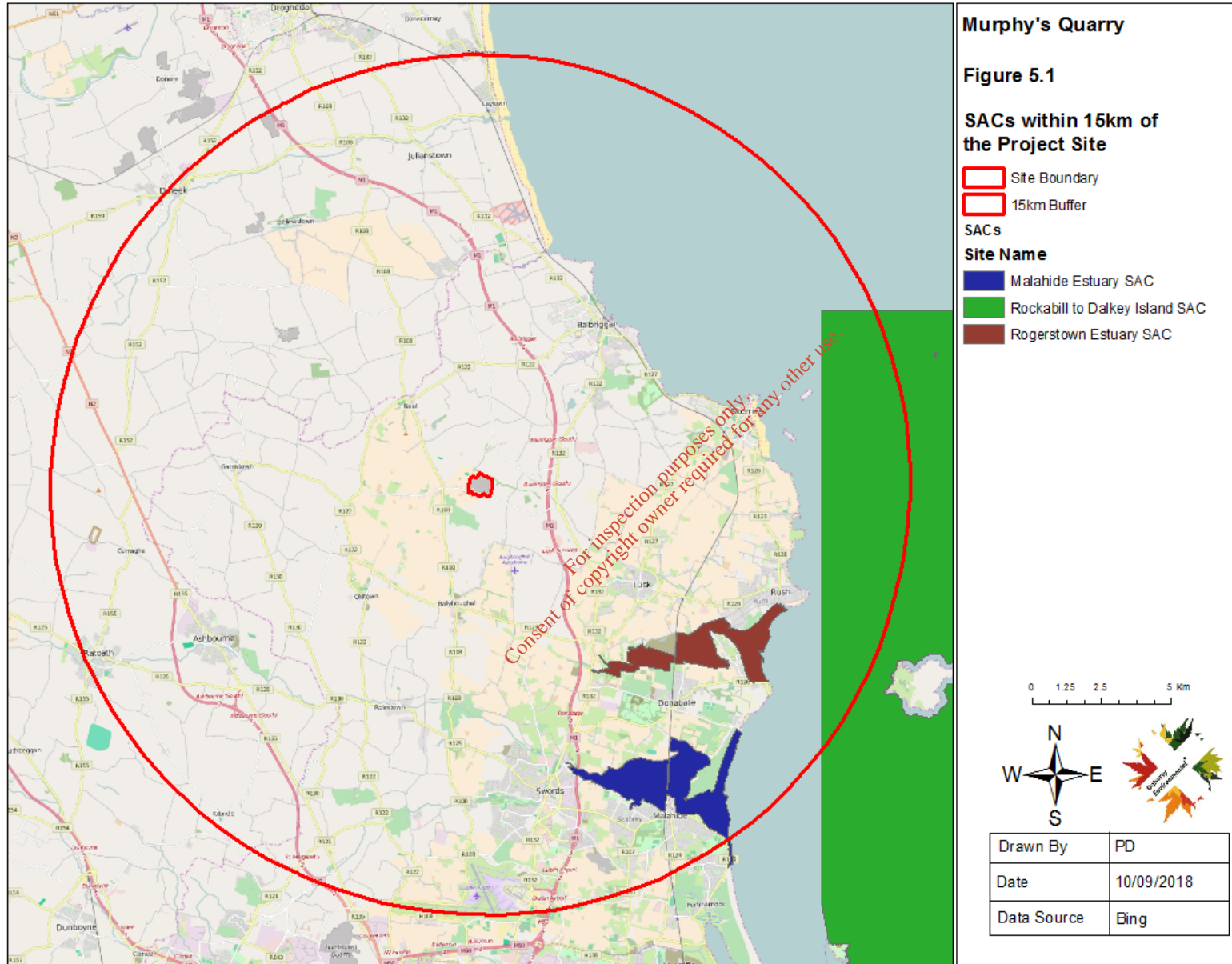
Potential impact pathways are restricted to hydrological pathways as these represent the principal emissions generated by activities at the project site. The potential for mobile qualifying species of surrounding European Sites to interact with the project site and immediate surrounding area is also included as a potential impact pathway.

The receptors represent European Sites and their associated qualifying features of interest.

European Sites and their associated qualifying features are likely to occur in the zone of influence of the project only where the above pathways establish a link between the study area and European Sites or where the project site is likely to play an important role in supporting populations of mobile species that are listed as special conservation interests/qualifying species for surrounding European Sites. Table 4.1 provides a determination as to whether each European Site within a 15km buffer distance of the project site occur within the zone of influence of the project. This determination has been undertaken in line with the following assessment questions:

- Is there a hydrological pathway linking the Project site to European Sites and does this pathway have the potential to function as an impact pathway?
- Are pathways connecting the project to Annex I qualifying habitats of European Sites?
- Does the project site have the potential to interact with or support Annex II qualifying species/special conservation interest bird species of these European Sites?

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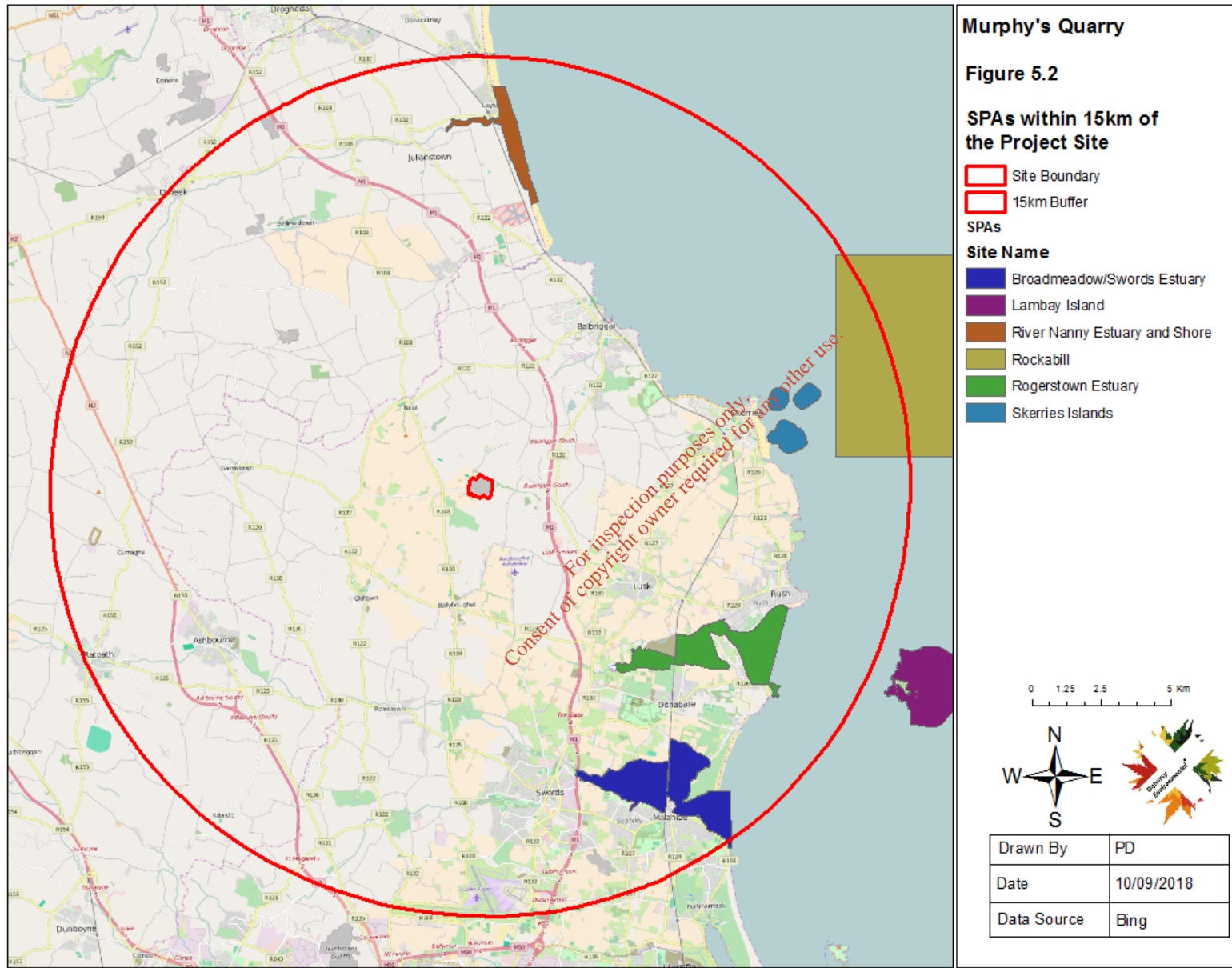


Table 4.1: Identification of European Sites occurring within the Zone of Influence of the Project

European Sites	Distance from Project Site	Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?	Are there Pathways connecting the project to Annex 1 qualifying habitats?	Does the Project have the potential to interact with Mobile Species?	Do European Sites occur within the Projects Zone of Influence?
Rogerstown Estuary SAC	7.5km to the southeast	No. While the Rath Great Stream discharges to the Ballough Stream, which in turn discharges into this SAC , the proposed TA will not have the potential to result in the emission of pollution to groundwater or surface water. The HRA carried out for the proposal has concluded that the risk to groundwater from the proposed increase in limits is acceptable as none of the parameters considered breached the Environmental Assessment Limits at either the 50 th or 95 th percentiles. In light of this	No. As no hydrological pathway will connect the activities associated with the TA to this European Sites there will be no pathway connecting the project to the qualifying habitats of this SAC.	No. No Annex II species are listed a qualifying features of interest for this SAC.	No. No potential impact pathways link the project site to this SAC..

		assessment there is no potential for the project to result in adverse effects to groundwater or surface water and as such there will be no groundwater or surface water pathways connecting the project site to this SAC.			
Rogerstown Estuary SPA	7.5km to the southeast	No. While the Rath Great Stream discharges to the Ballough Stream, which in turn discharges into this SAC, the proposed TA will not have the potential to result in the emission of pollution to groundwater or surface water. The HRA carried out for the proposal has concluded that the risk to groundwater from the proposed increase in limits is acceptable as none of the parameters considered breached the Environmental Assessment Limits at either the 50 th or 95 th percentiles. In light of this assessment there is no potential for	No. As no hydrological pathway will connect the activities associated with the TA to this European Sites there will be no pathway connecting the project to the qualifying habitats of this SAC.	No. There is no hydrological pathway connecting the project and its activities to this SPA and the project site does not play any role in support the waterbird species for which this site is designated.	No. No potential impact pathways link the project site to this SAC.

		the project to result in adverse effects to groundwater or surface water and as such there will be no groundwater or surface water pathways connecting the project site to this SAC.			
Malahide Estuary SAC	10km to the south	No. This SAC is located in a separate surface water catchment to the project.	No. There is no connection between the project and the qualifying habitats of this SAC.	No. The project is located at a remote distance from this SAC and is within another surface water catchment. There will be no potential for the project to interact with the Annex II qualifying species of this SAC.	No. No potential impact pathways link the project site to this SAC.
Broadmeadow Estuary SPA	10km to the south	No. This SAC is located in a separate surface water catchment to the project.	No. There is no connection between the project and the wetland habitats of this SPA.	No. The project is located at a remote distance from this SPA and does not play an important role in supporting wetland bird species for which this SPA is designated.	No. No potential impact pathways link the project site to this SPA.
Skerries	10km to	No. This is an island SPA and there is no hydrological pathway between the	No. There is no connection between the project and the wetland habitats of this	No. The project is located at a remote distance from this SPA and	No. No potential impact pathways link the project

Islands SPA	the east	project and this Site.	SPA.	does not play an important role in supporting wetland bird species for which this SPA is designated.	site to this SPA.
Rockabill SPA	12.3km to the east	No. This is an island SPA and there is no hydrological pathway between the project and this Site.	No. There is no connection between the project and the wetland habitats of this SPA.	No. The project is located at a remote distance from this SPA and does not play an important role in supporting wetland bird species for which this SPA is designated.	No. No potential impact pathways link the project site to this SPA.
River Nanny Estuary and Shore SPA	10km to the north	No. This SAC is located in a separate surface water catchment to the project.	No. There is no connection between the project and the wetland habitats of this SPA.	No. The project is located at a remote distance from this SPA and does not play an important role in supporting wetland bird species for which this SPA is designated.	No. No potential impact pathways link the project site to this SPA.
Rockabill to Dalkey Island SAC	12km to the east	No. This is a marine SAC and there is no hydrological pathway between the project and this Site.	No. There is no connection between the project and the qualifying habitats of this SAC.	No. The Annex II qualifying species of this SAC are marine mammals (Harbour Porpoise) and there is no connection between the project site and these animals.	No. No potential impact pathways link the project site to this SAC.

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Table 4.1 above examines the relationship between the project site and the European Sites occurring within the surrounding area. As noted within this table no European Sites occur in close proximity to the project site and no hydrological pathway connects the project site to these surrounding European Sites.

These European Sites are located approximately 14km downstream from the project site. As a hydrological pathway exists between the project site and these European Sites, further examination of the projects potential to contribute to water quality pressures to the Rogerstown Estuary European Sites.

The remainder of this Screening will assess the potential for the project to result in likely significant effects to these two European Sites.

5.0 DESCRIPTION OF ELEMENTS OF THE PROJECT LIKELY TO GIVE RISE TO IMPACTS TO FEATURES OF INTEREST

In the event that the project results in the discharge of pollutants to the Rogerstown Estuary European Sites there will be potential for the discharge operations to undermine the status of estuarine and mudflat habitats and undermine the quality of these habitats to support special conservation interest bird species of the Rogerstown Estuary European Sites.

5.1 IN-COMBINATION EFFECTS

Given that the project will not result in any activities that could lead to the emission of pollutants from the project site to the surrounding environment there will be no potential for it to combine with other developments or existing land use activities to result in adverse effects to European Sites in the wider surrounding area.

5.2 POTENTIAL EFFECTS TO CONSERVATION OBJECTIVES

The overall Conservation Objective for the qualifying species and habitats of SACs and SPAs is to maintain or restore the favourable conservation status of these features of interest. The favourable conservation status of species will be achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Favourable conservation status of a qualifying habitats is achieved when:

- its natural range, and area it covers within that range, are stable or increasing
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and;
- the conservation status of its typical species is favourable.

Given that the project and all associated activities are located at a remote distance from any European Sites and will not be connected via any impact pathways to European Sites there will be no potential for it to undermine the Conservation Objectives for the qualifying habitats and qualifying species of European Sites occurring within the wider surrounding area.

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6.0 ASSESSMENT OF THE PROJECTS POTENTIAL TO RESULT IN LIKELY SIGNIFICANT EFFECTS

Table 6.1 provides a Screening Assessment in line with EU Guidance (2001) Assessment Criteria used to examine the potential of the project to adversely impact upon European Sites. These assessment criteria are used to establish the absence of any likely significant effects arising from the project in view of its remote distance from any European Sites and the lack of any connection between it and any surrounding European Sites.

Table 6.1: Assessment of Effects

Assessment Criteria	
<i>Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) to European Sites:</i>	
Size and Scale	The project is considered to be small in size and scale.
Land-take	The project will not result in the loss of any qualifying habitats of any European Sites or any habitats upon which qualifying species of the surrounding European Sites rely.
Distance from European sites or key features of the site	The project site is located at a remote distance from any European Sites.
Resource requirements	No resources associated with European Sites in the wider surrounding area will be required for, or utilized by the project.

Emissions	The project will not result in emissions with potential to result in pollution to European Sites. Furthermore there are no potential emissions pathways linking the project activities to these surrounding European Sites.
Excavation requirements	No excavations will be required for the project.
Transportation requirements	The project will not result in changes to transport levels in the vicinity of the site.
Duration of construction, operation etc.	The site has a void of circa 7,500,000 tonnes with an annual maximum tonnage of 500,000 tonnes. If the site accepts the total allowable tonnage it will be completed within 15 years.
In-Combination Effects	As the proposed increased WAC limits at the project site is not anticipated to have the potential to result in adverse water quality effects downstream at the estuary, it will not have the potential to combine with other land uses and known threats and pressures to result in adverse effects to surrounding European Sites.
Describe any likely changes to the Rogerstown Estuary European Sites arising as a result of:	
Reduction of habitat area	The project will not result in the loss of any qualifying habitats.
Disturbance of	The project will not result in disturbance to qualifying species of sur European

key species	Sites.
Habitat or species fragmentation	The project will not result in any habitat or species fragmentation.
Reduction in species density	The project will not result in a reduction in the densities of QS of surrounding European Sites.
Changes in key indicators of conservation status	The project will have the potential to result in changes to key indicators of the conservation status of qualifying interests of surrounding SACs.
Describe any likely impacts on the European Site as a whole in terms of:	
Interference with key relationships that define the structure and function of the site	As outlined above the project will not have the potential to interfere within the key attributes that define the conservation status of the qualifying feature of interest of surrounding European Sites occurring within the zone of influence of the project.
Describe from the above the elements of the project or plan or combination of elements, where the above impacts are likely to be significant or where the scale of magnitude of impacts is not known.	

It has been concluded that likely significant effects to the European Sites in the wider area surrounding the project site will not arise as a result of the implementation of the proposed project. Therefore a Stage 2 Appropriate Assessment is not required.

7.0 SCREENING CONCLUSION

The proposed project has been screened for its potential to result in likely significant effects to the conservation status and integrity of surrounding European Sites. As this project site is not located within or adjoining European Sites, a Source-Pathway-Receiver model was used to identify potential impact pathways linking the project site to European Sites.

No potential impact pathways have been identified between the project site and the proposed activities outlined for this project and surrounding European Sites. There will be no emissions to groundwater, surface water or atmosphere as a result of the project. The absence of potential groundwater pathway is based on the findings of the HRA carried out for the proposal which concluded that the risk to groundwater from the proposed increase in limits is acceptable as none of the parameters considered breached the Environmental Assessment Limits at either the 50th or 95th percentiles. The proposal does not require any amendment to any site emission or waste volume as permitted under the site's Waste Licence W0129-02.

In addition to the absence of any emission pathways there will be no potential for the project to result in physical or other disturbance to qualifying species of surrounding European Sites and the project site does not support any qualifying species of surrounding European Sites.

In conclusion the avoidance of impacts to water quality eliminates the potential for an impact pathway to connect the project to surrounding European Sites and also eliminates the potential for the project to result in likely significant effects to the Conservation Objectives of the qualifying features of interest of the SAC and SPA occurring within the wider area surrounding the project site

In conclusion this Screening for Appropriate Assessment has resulted in a finding that there is no potential for the project to result in likely significant effects to any European Sites and as such a Stage II Appropriate Assessment is not required.

REFERENCES

Department of the Environment Heritage and Local Government (DEHLG) (2010). *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*. Second Edition, February, 2010.

European Commission (2002). *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*. Luxembourg.

European Commission (2006). *Explanatory Notes and Guidelines for the Assessment, Monitoring and Reporting under Article 17 of the Habitats Directive*. Luxembourg.

Fossitt J. A. (2000). *A Guide to Habitats in Ireland*. Heritage Council.

Heritage Council (2002). *Draft Habitat Survey Guidelines*. Heritage Council.

Patel Tonra Ltd. (2018). Memo: Quality of Water in Rock Cell, September 2018.