

Screening for Appropriate Assessment for an Application Maritime Usage Licence

From Aughinish Alumina Ltd.

FOR

Maintenance dredging at four sites and dumping of dredge material at a dump site off Foynes Island.

At Aughinish Alumina Jetty, Shannon Estuary, Co. Limerick

MARA Licence Reference: LIC230004

Prepared by:

S visor Assessment, Research and Data Unit

Step 1 - Description of Project/Proposal and local site characteristics

Brief description of the project

Aughinish Alumina Ltd have applied to MARA for a licence to undertake maintenance dredging to maintain the water depths at the deep water jetty at Aughinish Island, Co. Limerick.

Aughinish Alumina held both a foreshore licence (FS006578) and a dumping at sea permit (S0026-01) for maintenance dredging at the deep water jetty. Both of these consents expired in August 2024. The applicant has submitted an application to the EPA for a new dumping at sea permit.

The proposed maintenance dredging will be undertaken using a combination of trailer suction hopper dredger, long-arm reach excavator on a barge and plough dredging. The proposed activity includes five distinct locations around the jetty - Area A outer berth of the main jetty, Area B an intertidal area, Area C the inner berth of the main jetty, Area D the approach arm and Area E the dump site in the estuary channel. It is proposed that a proportion of the dredge production is Areas A and C will be dumped at this location.

The applicant has applied for a licence for 8 years. It is proposed to undertake a biannual dredge campaign with a maximum duration of 21 days. Dredging operations would take place for 24 hours per day during each 21-day cycle.



Figure 1: Location of the Proposed Dredge Locations and Dump Site, as per the licence application.

Brief description of the site characteristics

A benthic assessment report submitted with the licence application stated that mixed sediments the area around the jetty and Aughninish Island. Sediments were defined as slightly gravelly muddy sands or gravelly muddy sands. Faunal communities were characteristic of muddy estuarine sediments.

Step 2 - Identification of relevant Natura 2000 sites using Source-Pathway-Receptor Model and compilation of information on qualifying interests and conservation objectives.

Please note:

The Qualifying Interests (QI's) highlighted in **bold text** are screened in for Stage 2 Appropriate Assessment. For international Natura sites, only Qualifying Interest species that are screened in for Stage 2 Appropriate Assessment have been listed in the table below.

European Site Code	Distance from the Proposed Development (km)	List of Qualifying Interests	Connections (Source- Pathway Receptors)	Qualifying Interests considered further in Screening Y/N	European Site Screened In for Stage 2 Appropriate Assessment
Lower River Shannon SAC [Site Code IE002165]	Within MUL boundary	Sandbanks which are slightly covered by sea water all the time [1110] Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-</i> <i>Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia</i> <i>maritimi</i>) [1410] Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]	No	No source-pathway- receptor link for species or habitats	Yes

Table 1: Assessment of European sites.

		Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Estuaries [1130] Reefs [1170] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] Tursiops truncatus (Common Bottle-nose Dolphin) [1349] Phocoena phocoena (Harbour Porpoise) [1351] Halichoerus grypus (Grey Seal) [1364]	Yes	Yes – possible physical disturbance and habitat loss Yes – possible disturbance from underwater noise and physical disturbance and habitat loss Yes – possible disturbance from underwater noise	
Barrigone SAC (Site Code IE000432)	<5km	Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco- Brometalia</i>) (* important orchid sites) [6210] Limestone pavements [8240] <i>Euphydryas aurinia</i> (Marsh Fritillary) [1065]	No	No source-pathway- receptor link for species or habitats	No
Askeaton Fen Complex SAC [Site Code IE0022]	10-25km	Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] Alkaline fens [7230]	No	No source-pathway- receptor link for species or habitats	No
Curraghchase Woods SAC (Site Code IE000174)	10-25km	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Taxus baccata woods of the British Isles [91J0]	No	No source-pathway- receptor link for species or habitats	No

Blasket Islands SAC [Site code IE002172]	75-100km	Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] Submerged or partially submerged sea caves [8330]	No	No	No
		Phocoena phocoena (Harbour Porpoise) [1351] Halichoerus grypus (Grey Seal) [1364]	Yes – possible foraging	Yes – possible disturbance from underwater noise	Yes
		Reefs [1170]	No	No	
Slyne Head Islands SAC [Site code IE000328]	>100km	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349] <i>Halichoerus grypus</i> (Grey Seal) [1364]	Yes – possible foraging	Yes – possible disturbance from underwater noise	Yes
Slyne Head Peninsula SAC [Site code IE002074]	>100km	Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Annual vegetation of drift lines [1210] Perennial vegetation of stony banks [1220] Atlantic salt meadows (<i>Glauco-</i> <i>Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia</i> <i>maritimi</i>) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Machairs (* in Ireland) [21A0] Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia</i> <i>uniflorae</i>) [3110]	No	No	

		Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140]			
		European dry heaths [4030] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco- Brometalia</i>) (* important orchid sites)			
		[6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410] Lowland hay meadows (<i>Alopecurus</i> <i>pratensis, Sanguisorba officinalis</i>) [6510] Alkaline fens [7230] <i>Petalophyllum ralfsii</i> (Petalwort) [1395] <i>Najas flexilis</i> (Slender Naiad) [1833]			
		<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349]	Yes – possible foraging	Yes – possible disturbance from underwater noise	
Inishmore Island SAC [Site code IE000213]	>100km	Coastal lagoons [1150] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Dunes with Salix repens ssp. argentea (Salicion arenariae) [2170] Humid dune slacks [2190]	No	No	Yes

		Machairs (* in Ireland) [21A0] European dry heaths [4030] Alpine and Boreal heaths [4060] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco- Brometalia</i>) (* important orchid sites) [6210] Lowland hay meadows (<i>Alopecurus</i> <i>pratensis, Sanguisorba officinalis</i>) [6510] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014] Phocoena phocoena (Harbour Porpoise) [1351]	Yes - possible foraging	Yes – possible disturbance from underwater noise	
Kilkieran Bay and Islands SAC [Site code IE002111]	>100km	Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Atlantic salt meadows (<i>Glauco- Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Machairs (* in Ireland) [21A0] Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] Lowland hay meadows (<i>Alopecurus</i> <i>pratensis, Sanguisorba officinalis</i>) [6510] <i>Lutra lutra</i> (Otter) [1355] <i>Najas flexilis</i> (Slender Naiad) [1833]	No	No	Yes

		Phocoena phocoena (Harbour Porpoise) [1351] Phoca vitulina (Harbour Seal) [1365]	Yes – possible foraging	Yes – possible disturbance from underwater noise	
West Connacht Coast SAC [Site code IE002998]	>100km	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes – possible foraging	Yes – possible disturbance from underwater noise	Yes
Inishbofin and Inishshark SAC [Site code IE000278]	>100km	Coastal lagoons [1150] Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia</i> <i>uniflorae</i>) [3110] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030]	No	No	Yes
		Halichoerus grypus (Grey Seal) [1364]	Yes – possible foraging	Yes – possible disturbance from underwater noise	
Duvillaun Islands SAC [Site code IE000495]	>200km	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349] <i>Halichoerus grypus</i> (Grey Seal) [1364]	Yes – possible foraging	Yes – possible disturbance from underwater noise	Yes
		Machairs (* in Ireland) [21A0] Petalophyllum ralfsii (Petalwort) [1395]	No	No	
Inishkea Islands SAC [Site code IE000507]	>200km	Halichoerus grypus (Grey Seal) [1364]	Yes - possible foraging	Yes – possible disturbance from underwater noise	Yes
Roaringwater Bay and Islands SAC [Site code IE000101]	>200km	Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] Submerged or partially submerged sea caves [8330] Lutra lutra (Otter) [1355]	No	No	Yes

		Halichoerus grypus (Grey Seal) [1364] Phocoena phocoena (Harbour Porpoise) [1351]	Yes – possible foraging	Yes – possible disturbance from underwater noise	
		Reefs [1170]	No	No	
Rockabill to Dalkey SAC [IE003000]	>200km	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – possible foraging	Yes – possible disturbance from underwater noise	Yes
Kenmare River SAC [IE002158]	>200km	Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Atlantic salt meadows (<i>Glauco-</i> <i>Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia</i> <i>maritimi</i>) [1410] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] European dry heaths [4030] <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] Calaminarian grasslands of the <i>Violetalia</i> <i>calaminariae</i> [6130] Submerged or partially submerged sea caves [8330] <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014] <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] <i>Lutra lutra</i> (Otter) [1355]	Νο	No	Yes

		Phoca vitulina (Harbour Seal) [1365] Phocoena phocoena (Harbour Porpoise) [1351]	Yes – possible foraging	Yes – possible disturbance from underwater noise	
		Reefs [1170]	No	No	
Belgica Mound Province SAC [IE002327]	>200km	Phocoena phocoena (Harbour Porpoise) [1351] Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Bunduff Lough and Machair/Trawalua/Mullaghmore SAC [000625]	>200km	Mudflats and sandflats not covered by seawater at low tide [1140] Large shallow inlets and bays [1160] Reefs [1170] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Machairs (* in Ireland) [21A0] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco- Brometalia</i>) (* important orchid sites) [6210] Alkaline fens [7230] <i>Euphydryas aurinia</i> (Marsh Fritillary) [1065] <i>Petalophyllum ralfsii</i> (Petalwort) [1395] Phocoena phocoena (Harbour Porpoise)	No Yes – foraging	No Yes – possible disturbance from	Yes
		[1351]	possible	disturbance from underwater noise	

St Johns Point SAC [IE000191]	>200km	Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco- Brometalia</i>) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410] Alkaline fens [7230] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] <i>Euphydryas aurinia</i> (Marsh Fritillary) [1065]	No	No	Yes
		<i>Tursiops truncatus (</i> Common Bottlenose Dolphin) [1349]	Yes – foraging possible	Yes – possible disturbance from underwater noise	
Hook Head SAC [IE000764]	>200km	Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	No	No	Yes
		<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	
		Mudflats and sandflats not covered by seawater at low tide [1140] Reefs [1170]	No	No	
Carnsore Point SAC [IE002629]	>200km	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Blackwater Bank SAC [IE002953]	>200km	Sandbanks which are slightly covered by sea water all the time [1110]	No	No	Yes

		<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	
		Reefs [1170]	No	No	
Porcupine Bank Canyon SAC [IE003001]	>200km	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
		Reefs [1170]	No	No	
South-west Porcupine Bank SAC [IE002329]	>200km	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
		Submarine structures made by leaking gases [1180]	No	No	
Codling Fault Zone SAC [IE003015]	>200km	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Lambay Island SAC [IE000204]	>200km	Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Halichoerus grypus (Grey Seal) [1364] Phoca vitulina (Harbour Seal) [1365]	No	No	Yes
		<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	
North Anglesey Marine / Gogledd Môn Forol [UK 0030398]	Within Management Unit for Harbour porpoise ¹	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Bristol Channel Approaches / Dynesfeydd Môr Hafren [UK0030396]	Within Management Unit for Harbour porpoise	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes

¹<u>Review of Management Unit boundaries for cetaceans in UK waters (2023)</u>

North Channel [UK 0030399]	Within Management Unit for Harbour porpoise	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
West Wales Marine / Gorllewin Cymru Forol [UK 0030397]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Récifs et landes de la Hague [FR2500084]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Anse de Vauville [FR2502019]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Banc et récifs de Surtainville [FR2502018]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Chausey [FR2500079]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Baie du Mont Saint-Michel [FR2500077]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Estuaire de la Rance [FR5300061]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes

Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard [FR5300012]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Cap d'Erquy-Cap Fréhel [FR5300011]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Baie de Saint-Brieuc – Est [FR5300066]	Within Management Unit for Harbour porpoise	<i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Tregor Goëlo Est [FR5300010]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Côte de Granit rose-Sept-Iles [FR5300009]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Nord Bretagne DH [FR2502022]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Baie de Morlaix [FR5300015]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Abers - Côte des legends [FR5300017]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes

Ouessant-Molène [FR5300018]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
Côtes de Crozon [FR5302006]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes – foraging possible	Yes – possible disturbance from underwater noise	Yes
River Shannon and River Fergus Estuaries SPA [Site code IE004077]	Within MUL boundary	Cormorant (<i>Phalacrocorax carbo</i>) [A017] Whooper Swan (<i>Cygnus cygnus</i>) [A038] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Wigeon (<i>Anas penelope</i>) [A050] Teal (<i>Anas crecca</i>) [A052] Pintail (<i>Anas acuta</i>) [A054] Shoveler (<i>Anas clypeata</i>) [A056] Scaup (<i>Aythya marila</i>) [A062] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Lapwing (<i>Vanellus vanellus</i>) [A142] Knot (<i>Calidris canutus</i>) [A143] Dunlin (<i>Calidris alpina</i>) [A149] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Curlew (<i>Numenius arquata</i>) [A160] Redshank (<i>Tringa nebularia</i>) [A164] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Wetland and Waterbirds [A999]	Yes	Yes - possible visual & above water noise disturbance and disturbance from underwater noise	Yes

Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA [Site code IE 004161]	10-15km	Hen Harrier (Circus cyaneus) [A082]	No	No	No
Kerry Head SPA [Site code IE0004189]	25-50km	Fulmar (Fulmarus glacialis) [A009] Chough (Pyrrhocorax pyrrhocorax) [A346]	No	No	No
Loop Head SPA [Site code IE004119]	50-75km	Kittiwake (<i>Rissa tridactyla</i>) [A188] Guillemot (<i>Uria aalge</i>) [A199]	No	No	No

Step 3 Assessment of likely significant effects

(a) Identify all potential direct and indirect impacts that may have an effect on the conservation objectives of a European site, taking into account the size and scale of the project

Potential Impacts	Possible significance of potential impacts (duration, magnitude, etc.)
Physical disturbance and habitat loss	The works will be temporary in nature and will not result in permanent habitat loss.
Disturbance from underwater noise	Possible impacts on marine mammals and birds.
Increased suspended sediment concentrations	Possible temporal impacts on migratory fish species from increased suspended sediment concentrations.
Visual and above water noise disturbance	Possible temporal impacts on River Shannon and River Fergus Estuaries SPA Qualifying Interests.

In-combination effects

MARA has developed a stepwise approach for identifying other In-Combination plans and projects.

Using professional and scientific judgement, the key steps for assessing cumulative effects are as follows:

- 1. Defining the Cumulative Effects Spatial Scope (CESS)
- 2. Defining the Cumulative Effects Temporal Scope (CETS)
- 3. Impact identification
- 4. Pathway identification
- 5. Prediction
- 6. Identification of Plans or Projects that could act in combination
- 7. Screening Stage Cumulative Effects Assessment conclusion
- 8. Managing cumulative impacts to be carried out as part of Stage 2 AA process

The CESS has been defined as 10km and the CETS is 8 years. The definition of the CESS is based on acoustic survey equipment effective deterrence ranges as per JNCC Guidance on Assessing the Significance of Noise Disturbance against Harbour Porpoise SACs Conservation Objectives (<u>JNCC</u>, <u>2020</u>). And the CETS is the Maritime Usage Licence period.

Using the above 8 step approach, and following a search of relevant databases undertaken on the 25th September 2024, the below projects (Table 2) have been identified as potential incombination projects:

The following plans, related to the development of the maritime environment were also identified:

- Climate Action Plan 2023;
- River Basin Management Plan (RBMP);
- Limerick County Development Plan;
- Shannon Integrated Framework Plan for the Shannon Estuary.

These plans promote sustainable development in the maritime environment.

Likely significant in-combination effects between this project, the above listed 8 projects and 4 plans on the conservation objectives of Natura 2000 sites considered in this report cannot be excluded at this stage.

Application reference	Project description	Approximate distance from MUL area	Project Status	Cumulative effects
LIC230014	Shannon Foynes Port - Site Investigations for deep water terminal development at Foynes Island	3.5	MARA MUL under assessment.	Area within CESS Possible temporal overlap
FS006975	Shannon Foynes Port Company maintenance dredging	3.5	Approved – foreshore licence granted 03/03/2023	Area within CESS Possible temporal overlap
S0026-01 S0026-02	Dumping at Sea Permits for maintenance dredging at Aughinish Alumina.	Within MUL boundary	Current EPA Dumping at Sea permit application S0026-02 under assessment with the EPA (10/11/2023); S0026-01 expired August 2024.	Spatial overlap with Aughinish Maritime Usage Licence Area Within CESS Temporal overlap with MUL activity
\$0009-03	Shannon Foynes Port Company Dumping at Sea Permit	3.5	Dumping at Sea permit granted 21/12/ 2020 for 8 years	Area within CESS Possible temporal overlap
P0035-07	Aughinish Alumina IED Licence	Within MUL boundary	Active EPA licensed activity.	Spatial overlap with Aughinish Maritime Usage Licence Area Within the CESS Temporal overlap with MUL Activity
PA91.312146 and 318302	Aughinish Alumina Bauxite extension	Within MUL boundary	Approved – planning permission granted 31/08/22	Spatial overlap with Aughinish Maritime Usage Licence Area Possible temporal overlap
2360011	Shannon Foynes Port Development	3.5	Proposed – planning permission submitted January 2023	Area within CESS Possible temporal overlap
22742	Shannon Foynes Port Development	3.5	Proposed – planning permission submitted July 2022	Area within CESS Possible temporal overlap

Table 2: List of projects considered for in-combination assessment.

Were mitigation measures considered during the screening process? $\ensuremath{\mathsf{No}}$

Step 4 Screening Determination Statement

The assessment of significant effects:

On the basis of the information on file, and having regard to:

- The nature and scale of the proposed development
- The distance to the nearest European site
- The potential for in-combination effects with other plans and projects
- Possible physical disturbance and habitat loss
- Possible increased suspended sediment concentrations
- Possible disturbance and displacement from underwater noise
- Possible disturbance and displacement by visual impacts
- Possible displacement by above water noise

Having considered the legal framework applicable to Appropriate Assessment, it was concluded that the proposed maritime usage by Aughinish Alumina Ltd, to carry out maintenance dredging at four sites and dumping of dredge material at a dump site off Foynes Island at Aughinish Alumina Jetty, Shannon Estuary, Co. Limerick (LIC230004), will require Stage 2 Appropriate Assessment as it cannot be excluded beyond reasonable scientific doubt, on the basis of objective scientific information, following screening that the proposed project, individually, or in combination with other plans or projects, will have a significant effect on a European Site.

Conclusion

	Tick as appropriate	Recommendation
(i) It is clear that there is no likelihood of significant/possible effects on a European site		
(ii) It is uncertain whether the proposal will have a significant/possible effect on a European site	\checkmark	Proceed to Stage 2 Appropriate Assessment
(iii) Significant effects are likely		
Signature and Date of Recommending Officer		
Signature and Date of Decision Maker		