An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine

Date 30/12/22



Site Ref: T09/093

Mr. Neil Ruane Marine Institute Rinville Oranmore Co Galway

FISHERIES (AMENDMENT) ACT, 1997 (NO.23) NOTICE OF MINISTERIAL DECISION TO GRANT RENEWAL OF AN AQUACULTURE LICENCE.

Dear Mr. Ruane,

I would like to inform you that the Minister for Agriculture, Food and the Marine has approved the granting to you of a 10-year Aquaculture Licence, for the cultivation of multispecies to include finfish, shellfish and seaweeds for research purposes on site T09/093 Lehannah Pool, Bertraghboy Bay, Co.Galway. (see attached information note). I enclose a copy of the public notice of the decision which **the Department** has arranged to have published in the "Connacht Tribune".

Any person aggrieved by the decision may, in accordance with Section 41 of the Fisheries (Amendment) Act 1997, appeal against it in writing to the Aquaculture Licences Appeals Board (ALAB). This appeal must be lodged within one month beginning on the date of the publication of the decision.

The Licence will be issued to you as soon as possible after the end of the period of one month from the date of publication of the notice in "Connacht Tribune", if there is no appeal.

Please also find enclosed a draft copy of the Aquaculture Licence that may be issued by the Minister.

Note: As marine aquaculture operations require separate Aquaculture and Foreshore Licences, a separate determination on the foreshore licence application will be made once the licensing authority, or if appealed, ALAB have made a determination on the aquaculture licence application.

Yours sincerely

<u>Brendan Farr</u>

Aquaculture and Foreshore Management Division

An Lárionad Bia Mara Náisiúnta, An Cloichín, Cloich na Coillte, Corcaigh, P85 TX47 National Seafood Centre, Clogheen, Clonakilty, Co. Cork P85 TX47 T +353 (0)23 8859514 Brendan.Farr@agriculture.gov.ie www.agriculture.gov.ie An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine



S.12 (3) OF THE FISHERIES (AMENDMENT) ACT, 1997(NO.23) INFORMATION NOTE TO APPLICANT FOR THE PURPOSE OF REGULATION 18 OF THE AQUACULTURE (LICENCE APPLICATION) REGULATIONS 1998

REFERENCE NO:	T09/093
APPLICANT:	Marine Institute
AQUACULTURE TO WHICH DECISION RELATES	cultivation of multi-species to include finfish, shellfish and seaweeds for research purposes on site T09/093 Lehannah Pool, Bertraghboy Bay, Co.Galway
NATURE OF DECISION:	Grant of Aquaculture Licence.
DATE OF DECISION:	21/12/2022
CONDITIONS OF LICENCE:	See attached.
DURATION OF LICENCE:	10 years
ISSUE OF LICENCE:	The licence will be dated and issued as soon as practicable after the end of the period of one month from the date of publication of a notice in a newspaper circulating in the vicinity of the aquaculture, if no appeal is made to the Aquaculture Licences Appeals Board (ALAB) within that period, under Section 40 and 41 of the Fisheries (Amendment) Act, 1997.

Note: As marine aquaculture operations require separate Aquaculture and Foreshore Licences, a separate determination on the foreshore licence application will be made once the licensing authority, or if appealed, the Aquaculture Licences Appeals Board (ALAB) have made a determination on the aquaculture licence application.

An Lárionad Bia Mara Náisiúnta, An Cloichín, Cloich na Coillte, Corcaigh, P85 TX47 National Seafood Centre, Clogheen, Clonakilty, Co. Cork P85 TX47 T +353 (0)23 8859514 Brendan.Farr@agriculture.gov.ie www.agriculture.gov.ie

Published 30/12/2022

"Determination of Aquaculture Licensing application –T09/093

The Marine Institute has applied for authorisation to cultivate various species of finfish, shellfish and seaweeds for research purposes on the foreshore on a 21.76 hectare site (T09/093) at Lehannah Pool, Bertraghboy Bay, Co.Galway.

The Minister for Agriculture, Food and the Marine has determined that it is in the public interest to grant the licence sought. In making his determination the Minister considered those matters which by virtue of the Fisheries (Amendment) Act 1997, and other relevant legislation, he was required to have regard. Such matters include any submissions and observations received in accordance with the statutory provisions. The following are the reasons and considerations for the Minister's determination to grant the licences sought: -

- a) Scientific advice is to the effect that the waters are suitable;
- b) Public access to recreational and other activities can be accommodated by this project;
- c) The proposed development should have a positive effect on the economy of the local area;
- d) All issues raised during Public and Statutory consultation phase;
- e) There are no effects anticipated on the man-made environment heritage of value in the area;
- *f)* No significant effects arise regarding wild fisheries;
- g) The proposed aquaculture activities do not spatially overlap with Natura 2000 sites and there should be no significant impacts on the nearest Natura site(s).
- *h)* There are no significant impacts on the marine environment and the quality status of the area will not be adversely impacted;
- *i)* The updated Aquaculture and Foreshore licences contain terms and conditions which reflect the environmental protection now required under EU and National law."

Arna fhoilsiú 30/12/2022

"An t-iarratas ar Cheadúnú Dobharshaothraithe a Chinneadh – T09/093

Tá iarratas déanta ag Foras na Mara chun speicis éagsúla éisc eite, sliogéisc agus feamainn a shaothrú chun críocha taighde ar an úrthrá ar shuíomh 21.76 heicteár (T09/093) ag Linn Leitheanaigh, Cuan na Beirtrí Buí, Co. na Gaillimhe.

Tá an cinneadh déanta ag an Aire Talmhaíochta, Bia agus Mara go bhfuil sé chun leas an phobail an ceadúnas atá á lorg a dheonú. Le linn dó a chinneadh a dhéanamh bhreithnigh an tAire na hábhair sin ar ceanglaíodh air, de bhua an Achta Iascaigh (Leasú) 1997, agus reachtaíocht ábhartha eile, aird a thabhairt orthu. Áirítear ar ábhair den sórt sin aon aighneachtaí agus tuairimí a bhfuarthas de réir na bhforálacha reachtúla. Seo a leanas na cúiseanna agus na breithniúcháin a bhí le cinneadh an Aire na ceadúnais atá á lorg a dheonú: -

- a) Is í an chomhairle eolaíoch ná go bhfuil na huiscí oiriúnach;
- b) Féadfaidh an tionscadal seo freastal ar rochtain phoiblí ar ghníomhaíochtaí áineasa agus eile;
- c) Ba chóir go mbeadh tionchar dearfach ag an bhforbairt bheartaithe ar gheilleagar an cheantair áitiúil;
- d) Gach saincheist a ardaíodh le linn na céime comhairliúcháin Phoiblí agus Reachtúil;
- e) Níltear ag súil le haon tionchar ar oidhreacht chomhshaoil de dhéantús an duine a bhfuil luach léi sa cheantar;
- f) Ní thagann aon tionchar suntasach chun cinn maidir le hiascaigh fhiáine;
- g) Ní bhaineann na gníomhaíochtaí dobharshaothraithe atá beartaithe go spásúil le suíomhanna Natura 2000 agus níor cheart go mbeadh aon tionchar suntasach ar an suíomh/na suíomhanna Natura is cóngaraí.
- h) Níl aon tionchar suntasach ar an dtimpeallacht mhuirí agus ní bheidh drochthionchar ar stádas cáilíochta an cheantair;
- i) Tá téarmaí agus coinníollacha sna ceadúnais Dobharshaothraithe agus Urthrá nuashonraithe a léiríonn an chosaint chomhshaoil atá riachtanach anois faoi dhlí an AE agus dlí Náisiúnta."

Submission AGR 01475-22: Recommendation to grant the renewal and review of aquaculture licence application T09/093.

TO: Minister STATUS: Completed PURPOSE: Approval AUTHOR: OConnell, James OWNER: OConnell, James REVIEWERS: Horan, Helena Waldron, Ultan Beamish, Cecil Foley, MarkW

DIVISION: Aquaculture and Foreshore Management Division DECISION BY:

Final comment

approved by Minister

Action required

Ministerial determination in relation to the renewal and review of an aquaculture licence application from the Marine Institute for a site in Lehannagh Pool, Beirtreach Buí Bay, Co. Galway (Site ref: T09/093)

Executive summary

The Minister's determination is requested in relation to an application for the renewal and review of an Aquaculture Licence from the Marine Institute, Rinville, Oranmore, Co. Galway. The renewal and review application is for the cultivation of various species of the families gadidae, salmonidae, mugilidae, labrida and cyclopteridae (see 'detailed information') on Site **T09/093**, totalling 21.76 hectares on the foreshore at Lehannagh Pool, Beirtreach Buí Bay, Co. Galway.

A submission in respect of the application for the Foreshore Licence will follow for the Minister's consideration.

It is recommended that the Minister determines the Aquaculture Licence sought **be granted** to the Marine Institute for the reasons outlined in the 'Detailed Information' section below.

Detailed information

The Marine Institute have applied for a renewal and review of Aquaculture Licence number AQ176 at a site in Beirtreach Buí Bay, Co. Galway (**TAB A**). The application is for the continued use of Site T09/093A for the cultivation of various marine species for the purpose of research and a review of the application to include clarification regarding the specific species to be cultivated. The renewal of the licence originally defined the species to be farmed as finfish (cod, salmonids, cleaner fish of the wrasse family (*Labridae*) and lumpsucker (*Cyclopterus lumpus*)), shellfish (blue mussels (*Mytilus edulis*), other bivalves, sea urchins, crustaceans, and seaweed (marine macro-algae of the genera *Alaria, Laminaria*). The Marine Institute have also applied for a review of the licence to include the specific species to be cultivated. These are Finfish (cod, salmonids and cleaner fish of the wrasse family (*Labridae*) and lumpsucker (*Cyclopterus lumpus*)), Molluscs (bivalves including blue mussels, flat oyster, King scallop, Queen scallop), Echinoderms (including sea urchins and sea cucumbers), Crustaceans (including lobster) and Macroalgae (including seaweed species in the families *Chlorophyta, Rhodophyta* and *Phaeophyta*).

Note: Tabs attached to this submission may contain additional information which is subject to redaction if transmitted to third parties.

BACKROUND

Marine aquaculture operations require separate Aquaculture and Foreshore Licenses, and Ministerial approval is requested in respect of this submission (Aquaculture Submission). A separate Foreshore Submission will follow.

The Aquaculture Licence defines the activity that is permitted on a particular site and the Foreshore Licence allows for the occupation of that area of foreshore. The continuing validity of each licence is contingent on the other licence remaining in force.

APPLICATION FOR AN AQUACULTURE LICENCE

A renewal and review application for an Aquaculture Licence has been received from the applicant referred to above (in conjunction with an application for a Foreshore Licence), for the cultivation of multi-species on Site T09/093, totalling 21.76 hectares on the foreshore at Lehannagh Pool, Beirtreach Buí Bay, Co. Galway (TAB A).

LICENCE FEES

There are no outstanding fees associated with this licence.

LEGISLATION

Section 7 of the Fisheries (Amendment) Act 1997 provides that the licensing authority (i.e. Minister, delegated officer or, on appeal, the Aquaculture Licences Appeals Board) may, if satisfied that it is in the public interest to do so, licence a person to engage in aquaculture.

CONSULTATION AND PUBLIC COMMENT

The application was sent to the Department's technical experts, statutory consultees and was also publicly advertised in a composite public notice covering both aquaculture and foreshore elements.

Technical Consultation - TAB B

Marine Engineering Division (MED): Stated no objections to the licensing of this site.

Statutory Consultation - TAB C

Regulation 10 of the Aquaculture (Licence Application) Regulations, 1998 requires certain statutory bodies to be notified of an Aquaculture Licence application.

Comments were received from the following statutory bodies:

Sea Fisheries Protection Authority: Stated no objections.

Marine Survey Office (MSO): Stated no objection from a navigation viewpoint.

It is proposed to insert a specific condition covering MSO matters in any licence which may issue as follows:

The Minister's determination in respect of this licence is conditional upon immediate full compliance by the Licensee in respect of all requirements and conditions which are imposed under the relevant legal provisions applicable to the Marine Survey Office.

<u>Commissioner of Irish Lights (CIL)</u>: Stated no objection to the application and recommended that the aids to navigation as sanctioned are in place prior to renewing the Licence.

<u>Marine Institute (MI)</u>: In order to avoid potential conflict of interest, the Marine Institute, did not submit observations on this application under Section 10 of the Aquaculture (Licence Application) Regulations, 1998 (SI No. 236 of 1998).

Irish Water: Stated no objection but noted the existence of primary and secondary discharges operated by Irish Water discharging within 11km of the proposed development.

<u>Dept. of Housing, Local Government & Heritage:</u> Stated its agreement with the conclusions of the Natura Impact Screening document. This assessment did not identify any potential significant effects on the conservation objectives of Natura sites, listed under the European Habitats and Birds Directives, in the operation of the research facility.

<u>Inland Fisheries Ireland:</u> Noted that the site is near the Owengowla river and concern for sea trout stocks in the area vs-a-vis sea lice infections. However, the IFI acknowledged the research element to this application and that the facility will only hold 50 tons of salmon. In that context, IFI had no objection to this application for renewal and review of this research aquaculture licence

<u>Údarás na Gaeltachta</u>: Stated no objection to the application. It noted that research conducted at the site would support the creation of local and regional economic development opportunities in the Gaeltacht.

Response from applicant – TAB D

The applicant noted the points raised by the statutory consultees and agreed to adhere to the recommendations presented.

Public Consultation

The application was publicly advertised using a composite public notice covering both aquaculture and foreshore elements, in The Connacht Tribune on 11th March 2022. The application and supporting documentation were available for inspection at Clifden and Carna Garda Stations for a period of 30 days from the date of publication of the notice in the newspaper.

There were no objections/comments received from the public consultation process.

CRITERIA IN MAKING LICENSING DECISIONS

The licensing authority, in considering an application, is required by statute to take account of, as appropriate, the following points and must also be satisfied that it is in the public interest to license a person to engage in aquaculture:

a) the suitability of the place or waters

Scientific advice is to the effect that the waters are suitable for the cultivation of mussels and oysters.

b) other beneficial uses of the waters concerned

Public access to recreational and other activities can be accommodated by this project. Aquaculture appropriately licensed can coexist with leisure activities

c) the statutory status of the waters

(i) Natura 2000

Regulation 5 of the Aquaculture (Licence Application) Regulations, 1998 states the Minister may require the applicant to submit an Environmental Impact Statement or in the case of applications received after 16th May 2017, an Environmental Impact Assessment Report (EIAR), if the Minister considers that the proposed aquaculture is likely to have significant effects on the environment.

A Departmental EIA Screening Group, comprising officials from Bord Iascaigh Mhara, the Department's Engineering Division, AFMD, alongside an independent Environmental Impact Assessment Screening Consultant, was set up to advise the Minister on the environmental issues relating to EIS requirements.

The EIA Screening Group utilised the selection criteria listed in Annex III of Council Directive 2011/92/EU as the basis for its deliberations. The criteria relate to the characteristics, location and potential impact of the project. The Group produced an EIA screening report in respect of the application (see **TAB E**). The Minister concluded as recommended by the screening group that the proposed aquaculture activity would not have a significant effect on the environment and that an EIAR is not required. (**TAB F**)

The EIA Directive also requires that "Member States shall ensure that the determination made by the competent authorities ... is made available to the public". This was accommodated by placing the Ministerial determination on the Department's website.

(ii) Shellfish Waters

The site is not located within Designated Shellfish Waters.

d) the likely effects on the economy of the area

Aquaculture has the potential to provide a range of benefits to the local community, such as attraction of investment capital, development of support services, etc.

e) the likely ecological effects on wild fisheries, natural habitats, flora and fauna

No significant issues arose regarding wild fisheries. The Department of Housing, Local Government & Heritage (DHLGH) agreed with the conclusions of the EIA Screening Group that the proposed aquaculture activity would not have a significant effect on the environment

f) the effect on the environment generally

(i) The Minister is obliged pursuant to Regulation 5 (2) of Licence Applications Regulations to consider on a case-by-case basis whether the proposed aquaculture is likely to have significant effect on the environment.

(ii) The Minister has already determined that an Environmental Impact Assessment Report is not required for this project. (See TAB F)

RECOMMENDATION

It is recommended that the Minister:

approves the granting of a renewal and review an Aquaculture Licence to the Marine Institute, Rinville, Oranmore, Co. Galway for a period of ten (10) years. The purpose of the renewal and review application is for the cultivation of various species of the families gadidae, Salmonidae, mugilidae, labrida and cyclopteridae (see 'detailed information') on Site **T09/093** totalling 21.76 hectares on the foreshore at Lehannagh Pool, Beirtreach Buí Bay, Co. Galway in accordance with the terms and conditions of the attached draft Aquaculture Licence. (**TAB G**)

REASONS FOR DECISION

The Minister for Agriculture, Food and the Marine is required to give public notice of both the licensing determination and the reasons for it. To accommodate this, it is proposed to publish the following on the Department's website, subject to the Minister approving the above recommendation:

"Determination of Aquaculture/ Foreshore Licensing application – T09/093

The Marine Institute has applied for authorisation to various species of the families gadidae, Salmonidae, mugilidae, labrida and cyclopteridae cages on the sub-tidal foreshore on a 21.76 hectare site (T09/093) at Lehannagh Pool, Beirtreach Buí Bay, Co. Galway.

The Minister for Agriculture, Food and the Marine has determined that it is in the public interest to grant the licences sought. In making his determination the Minister considered those matters which by virtue of the Fisheries (Amendment) Act 1997, and other relevant legislation, he was required to have regard. Such matters include any submissions and observations received in accordance with the statutory provisions. The following are the reasons and considerations for the Minister's determination to grant the licences sought: -

Scientific advice is to the effect that the waters are suitable;

Public access to recreational and other activities can be accommodated by this project;

The proposed development should have a positive effect on the economy of the local area;

All issues raised during Public and Statutory consultation phase;

There are no effects anticipated on the man-made environment heritage of value in the area;

No significant effects arise regarding wild fisheries;

The proposed aquaculture activities do not spatially overlap with Natura 2000 sites and there should be no significant impacts on the nearest Natura site(s).

There are no significant impacts on the marine environment and the quality status of the area will not be adversely impacted;

The updated Aquaculture and Foreshore licences contain terms and conditions which reflect the environmental protection now required under EU and National Iaw."

Related submissions

There are no related submissions.

User details

INVOLVED: OConnell, James Horan, Helena Waldron, Ultan Beamish, Cecil Sub Sec Gens Office eSub Sec Gen eSub Ministers Office eSub Minister READ RECEIPT: OConnell, James Horan, Helena Waldron, Ultan Beamish, Cecil Foley, MarkW Whelan, Paul



AQUACULTURE - LICENSING UNDER

FISHERIES (AMENDMENT) ACT 1997 as amended

<u>and</u>

FORESHORE ACT 1933 as amended

Application Form for an Aquaculture and Foreshore Licence for a <u>single specific site</u>. If a Licence is required for more than one site a separate application form must be completed for each site.

Important Note

Section 4 of the Fisheries and Foreshore (Amendment) Act, 1998 (No. 54 of 1998) prohibits any person making an application for an Aquaculture Licence from commencing aquaculture operations until duly licensed under the Fisheries (Amendment) Act, 1997 (No. 23 of 1997), and provides that a breach of that prohibition will cause the application to fail.

A copy of an Environmental Impact Statement and Natura Impact Statement should be enclosed, if required, with all new, review and renewal applications. See Guidance Notes Section 3.

> Aquaculture & Foreshore Management Division Department of Agriculture, Food and the Marine National Seafood Centre Clonakilty, Co. Cork P85 TX47 Telephone: (023) 8859500 Fax: (023) 8821782

> > **Revised May 2018**

AQUACULTURE AND FORESHORE LICENCE APPLICATION FORM, for purposes of FISHERIES (AMENDMENT) ACT, 1997 and FORESHORE ACT, 1933

NB: The accompanying Guidance Notes should be read before completing this form.

Note: Details provided in Parts 1 and 2 will be made available for public inspection. Details provided in Parts 3 and 4 and any other information supplied will not be released except as may be required by law, including the Freedom of Information Act 1997 as amended.

USE BLOCK CAPITALS IN BLACK INK PLEASE

For Office Use

Application Ref. No._

Date of Receipt (Dept. Stamp):

Type of Appli	cant (tick one)	
Sole Trader		
Partnership		
Company		
Co-Operative		
Other	Please specify-	STATE AGENCY

PART 1: PRELIMINARY DETAILS

Applicant's Name(s)	
1.	MARINE INSTITUTE
Address:	RINVILLE
	ORANMORE
	CO. GALWAY
	H91 R673
2.	
Address:	
4.	
Address:	

PART 1: PRELIMINARY DETAILS

Contact in case of enquiries (if different from above)						
Contact Name	DAVID JACKSON					
Organisation Name (if applicable)	MARINE INSTITUTE					
Address	RINVILLE ORANMORE COUNTY GALWAY H91 R673 IRELAND					

TYPE OF APPLICATION – please indicate relevant type of application This Application Form is valid for each type of application - <i>See Guidan</i>	
(i) Aquaculture Licence	
(ii) Trial Licence	
(iii) Foreshore Licence, if Marine Based	
(iv) Review of Aquaculture Licence	Review
(v) Renewal of Aquaculture Licence	Renew

TYPE OF AQUACULTURE

See Guidance Note 3.2

Indicate the relevant type of application with a tick.

(i) MARINE-BASED

	Finfish	x	Go to Parts 2.1 and 2.1A
	Shellfish Subtidal	x	Go to Parts 2.2 and 2.2A
	Intertidal		Go to Parts 2.2 and 2.2A
	Seaweed/Aquatic Plants/Aquatic Fish Food	x	Go to Parts 2.3 and 2.3A
(ii)	LAND-BASED Finfish Shellfish	r	urts 2.4 and 2.4A
	Aquatic Plants Aquat	ic Fish Food	Go to Parts 2.4 and 2.4A
(iii)	TRIAL LICENCE		Go to appropriate Parts as above and to Part 2.5.

PART 2: DETAILS RELATING TO THE PROPOSED AQUACULTURE

PROJECT

2.1 MARINE-BASED AQUACULTURE – FINFISH

When filling out this section refer also to 2.1A and Guidance Note 3.3 for information on Conditions and Documents required with this application type

Proposed Site Location

- (i) Bay: BEIRTREACH BUÍ BAY
- (ii) County: GALWAY
- (iii) OS Map No: O.S. SHEET 51

(iv) Co-ordinates of Site: (please specify coordinate reference system used e.g. Irish Grid (IG) Irish Grid (Easting and Northing)

078664, 240493to Irish National Grid Reference point079061, 240707to Irish National Grid Reference point079320, 240266to Irish National Grid Reference point079054, 240119to Irish National Grid Reference point078820, 240220to the first mentioned point

(v) Size of Site (hectares): 21.761 Ha

(vi) Species (common and scientific name):

VARIOUS TO INCLUDE SPECIES OF THE FAMILIES GADIDAE; SALMONIDAE; MUGILIDAE; LABRIDAE; CYCLOPTERIDAE (FOR MORE DETAIL SEE ANNEX 1).

(vii) Proposed source and strain of stock for use in the operation:

STOCK WILL BE SOURCED FROM LICENCED COMERCIAL AND/OR RESEARCH FACILITIES.

(NB Importation of smolts into the State or movement of smolts within the State requires notification to the Marine Institute as per the Fish Health Authorisation Regulations.) (Refer to Guidance Notes Section 6. – Fish Health Authorisation)

(viii) Method of culture (e.g. nets, tanks, cages etc):

NET PEN CAGES (50m CIRCUMFERENCE) AND SENTINEL NET PENS (4m x 4m)

(ix) Number, type and shape, cubic capacity, depth of cages/tanks:

MAXIMUM OF 12 CAGES OF 50m CIRCUMFERENCE, 10m DEPTH (SEE ANNEX 1 AND ASSOCIATED DRAWINGS FOR MORE DETAIL).

(x) Sea Cage characteristics (mesh size, net type):

CAGES ARE 50m DIAMETER HDPE MANUFACTURED BY KAMES AQUACULTURE EQUIPMENT LTD. NETS ARE MANUFACTURED BY SWAN NET GUNDRY AND ARE 16mm MESH OF KNOTLESS NYLON. (xi) Maximum stocking density within cages Biomass (per cubic metre):

<25kg per m³

(xii) Biomass (maximum) in tonnes – enter in table below:

N/A. SITE IS FOR RESEARCH PURPOSES (SEE ANNEX 1 FOR MORE DETAIL). STOCKING IS ROUTINELY RECORDED ON SITE RECORDS.

Species	Year 1	Year 2	Year 3	Year 4

2.1 Marine Based Aquaculture – Finfish (continued)

(xiii) Reasons for site selection: (refer to Environmental Impact Statement – EIS)

EXISTING LICENSED SITE.

(xiv) Is the site located in/adjacent to a sensitive area e.g. SPA (Special Protection Area) or SAC (Special Area of Conservation) i.e. a Natura 2000 site? (Refer to Guidance Note 3.3.1.-Natura 2000

ADJACENT TO CONNEMARA BOG COMPLEX, A TERRESTRIAL SITE: SPA (004181), SAC (002034).

(xv) Methods used to harvest the biomass and details of any subsequent processing of biomass

N/A – THE SITE IS FOR RESEARCH PURPOSES ONLY. ALL FISH WILL BE HUMANELY EUTHANISED ACCORDING TO EU DIRECTIVE 2010/63/EU AND DISPOSED OF IN A LICENSED PREMISES.

(xvi) Is the application accompanied by an Environmental Impact Statement (EIS), Natural Impact Statement (NIS) and/or an Integrated Pest Management Plan (where required)

THE SITE IS EXEMPT FROM AN EIS AS PER S.I. 464 of 2016. A NATURA IMPACT STATEMENT (NIS) AND AN INTEGRATED PEST MANAGEMENT (IPM) PLAN HAVE BEEN SUPPLIED WITH THE APPLICATION.

Refer to Guidance Note 3.3.1 for information on the Environmental Impact Statement (EIS)/Natura Impact Statement (NIS) and Guidance Note 3.3.2 for Integrated Pest Management Plan, which are to be included separately for this application.

See Part 2.1A for details of documentation to be included with this application type

2.1A DOCUMENTATION REQUIRED FOR MARINE-BASED FINFISH AQUACULTURE

(to be included separately with a Licence Application for a new site or for a renewal or review (if required) of an existing Licence)

1. Environmental Impact Statement (EIS) and Natura Impact Statement (NIS)

Regulations 4 and 5 of the Aquaculture (Licence Application) Regulations 1998 (S.I.No. 236 of 1998) as amended provides that it is mandatory to submit an EIS with certain aquaculture licence applications. All such applications located within or adjacent to a "Natura 2000" site must accompanied by a Natura Impact Statement (NIS). The Guidance Note, Section 3.3.1 gives information on the requirement to submit both an Environmental Impact Statement and Natura Impact Statement.

2. Integrated Pest Management Plan (IPM)

An Integrated Pest Management (IPM) Plan for the control of sea lice infestations on salt water salmon farms must be established for the proposed application in compliance with the National Monitoring Protocol for Offshore Finfish Farms.

The Plan must be developed in conjunction and with the agreement of the Marine Institute (MI), and supporting correspondence from the MI must be attached to demonstrate this.

The Guidance Note, Section 3.3.2 gives information on Integrated Pest Management Plans.

The IPM Plan must contain the information as specified in Annex B of the Guidance Note.

- **3.** Scale drawing of the structures to be used and the layout of the farm. The proposed site drawings must illustrate all site structures above and below the water including mooring blocks. (See Guidance Note 3.3.2)
- 4. An appropriate Ordnance Survey Map (recommendation is a map to the Scale of 1:10,000 / 1:10,560, i.e. equivalent to a six inch map). Note: The proposed access route to the site from the public road across tidal foreshore, (e.g. pier or slipway) must also be shown on the map.
- 5. The prescribed application fee (See Guidance Note Section 4)
- 6. If the applicant is a limited Company within the meaning of the Companies Act 1963, as amended, the Certificate of Incorporation and Memorandum and Articles of Association.
- 7. If the applicant is a Co-operative, the Certificate of Incorporation and Rules of the Co-operative Society.

NOW COMPLETE PARTS 2.6, 3, 4 AND 5 PLEASE

2.2 MARINE-BASED SHELLFISH AQUACULTURE

When filling out this section refer also to 2.2A and Guidance Note 3.3 for information on Conditions and Documents required with this application type

Proposed Site Location

- (i) Bay: BEIRTREACH BUÍ BAY
- (ii) County: GALWAY
- (iii) OS Map No: O.S. Sheet 51
- (iv) Co-ordinates of Site: (please specify coordinate reference system used e.g. Irish Grid (IG) or Irish Transverse Mercator (ITM) or Latitude/Longitude [in which case specify whether ETRS89 or WG84 etc.] Irish Grid (Easting and Northing)

078664, 240493	to Irish National Grid Reference point
079061, 240707	to Irish National Grid Reference point
079320, 240266	to Irish National Grid Reference point
079054, 240119	to Irish National Grid Reference point
078820, 240220	to the first mentioned point

(v) Size of Site (hectares): 21.761 Ha.

(vi) Species (common and scientific name) and whether native or non-native species: (see Guidance Notes 3.3.1)

VARIOUS NATIVE INVERTEBRATE SPECIES FROM THE PHYLUM MOLLUSCA (MOLLUSCAN BIVALVE SHELLFISH), PHYLUM ECHINODERMATA (E.G. URCHINS, SEA CUCUMBERS) AND THE SUBPHYLUM CRUSTACEA (E.G. LOBSTERS) (SEE ANNEX 1 FOR MORE DETAIL).

(vii) Whether production will be sub-tidal or inter-tidal?

CULTIVATION WILL BE SUB-TIDAL.

(viii) Please supply details of (a) source of seed e.g. wild hatchery and location and (b) means of collection and introduction to culture.

SEED WILL BE SOURCED FROM LICENSED COMMERCIAL AND/OR RESEARCH FACILITIES, OR FROM NATURAL SETTLEMENT E.G. ON COLLECTORS PLACED ON SITE. IF SOURCED FROM THE WILD, PRIOR APPROVAL FROM THE RELEVANT AUTHORITIES WILL BE SOUGHT.

NB Importation of seed into the State or movement of seed within the State requires notification to the Marine Institute as per the Fish Health Authorisation Regulations – See Guidance Notes Section 6

(ix) Method of culture (rope, trestles – intensive; bottom – extensive; other)

ROPE AND SUSPENDED CULTURE USING LONGLINES, LANTERN NETS, OYSTER TRAYS, OYSTER BASKETS. ECHINODERMS SUCH AS SEA CUCUMBERS MAY BE CULTURED IN SMALL CAGES ON THE SEA BED.

(x) Proposed number of lines/ropes/trestles as per site layout drawing

VARIOUS, SUSPENDED FROM THE LONGLINES IN THE LOW TROPHIC GRID (SEE ANNEX 1).

(xi) Proposed Production Tonnage:

N/A SITE IS FOR RESEARCH PURPOSES. STOCKING IS ROUTINELY RECORDED ON SITE RECORDS.

Year 1 Year 2 Year 3 Year 4 Year 5	Year 1 Year 2 Year 3 Year 4 Yea
------------------------------------	---------------------------------

(xii)

(a) Please outline the reasons for site selection:

EXISTING AQUACULTURE LICENCE.

(b) If using trestles please outline the physical characteristics of the site which make it suitable for using trestles

N/A

(xiii) Is it intended that the product is for direct human consumption or half grown? Please specify

NEITHER, RESEARCH PURPOSES ONLY.

Х

(xiv) How will the visual impact issues of the flotation devices for the proposed application be addressed?

LOW IMPACT CAGES AND LONGLINE FLOATS WILL BE USED IN ACCORDANCE WITH BEST PRACTICE.

(xv) Is the site located in Designated Shellfish Waters Area? (Refer to Guidance Note 3.3.2)

res no	Yes		No
--------	-----	--	----

If **yes** give details.

If **no** outline the reasons why you believe the site suitable for the proposed aquaculture, notwithstanding its location outside Designated Shellfish Waters Area?

THE SITE IS FOR RESEARCH PURPOSES ONLY AND STOCK IS NOT DESTINED FOR HUMAN CONSUMPTION.

(xvi) Has the area been classified under Food Safety Legislation? (For Bivalve Molluscs). What is the current classification of the area for the proposed species applied for?

NOT CURRENTLY CLASSIFIED.

(xvii) Is the site located in/adjacent to a sensitive area e.g. SPA (Special Protection Area) or SAC (Special Area of Conservation) i.e. a Natura 2000 site? (Refer to Guidance Note 3.3.1-Natura 2000 sites)

ADJACENT TO CONNEMARA BOG COMPLEX, A TERRESTRIAL SITE: SPA (004181), SAC (002034).

(xviii) Are there known sources of pollution in the vicinity e.g. sewage outfall? Yes / No If yes please give full details.

NO.

(xix) Methods used to harvest the shellfish and details of any subsequent processing of shellfish

N/A, SHELLFISH ARE PRODUCED FOR RESEARCH PURPOSES ONLY AND NOT FOR HUMAN CONSUMPTION.

(xx) Describe any proposed purification facilities to be used:

N/A, SHELLFISH ARE PRODUCED FOR RESEARCH PURPOSES ONLY AND NOT FOR HUMAN CONSUMPTION.

(xxi) What are the main predators of the species to be cultivated?

STARFISH.

(xxii) Describe the method(s) which will be used to control them.

SUSPENDED OFF-BOTTOM CULTURE OR SMALL MESH CAGES ON THE BOTTOM, EXCLUDING ACCESS FOR PREDATORS.

See Part 2.2A for details of documentation to be included with this application type

2.2A DOCUMENTATION REQUIRED FOR MARINE-BASED SHELLFISH AQUACULTURE

(to be included separately with a Licence Application for a new site or for a renewal or review of an existing Licence)

- 1. An appropriate Ordnance Survey Map (recommendation is a map to the Scale of 1:10,000/1:10,560, i.e. equivalent to a six inch map). Note: The proposed access route to the site from the public road across tidal foreshore must also be shown on the map.
- 2. Scale drawing of the structures to be used and the layout of the farm. The proposed site drawings must illustrate all site structures above and below the water including mooring blocks. (recommended scales normally 1:100 for structures and 1:200 for layout) (See Guidance Note 3.3.2)
- 3. The prescribed application fee (See Guidance Note Section 4)
- 4. If the applicant is a limited Company within the meaning of the Companies Act 1963. as amended, the Certificate of Incorporation and Memorandum and Articles of Association
- 5. If the applicant is a Co-operative, the Certificate of Incorporation and Rules of the Co-operative Society
- 6. Environmental Impact Statement (if required) in certain cases- See Guidance Notes Section 3.3.1
- 7. Alien Species dossier (where required) See Guidance Notes Section 3.3.1

NOW COMPLETE PARTS 2.6, 3, 4 AND 5 PLEASE

2.3 MARINE-BASED SEAWEED/AQUATIC PLANTS/AQUATIC FISH FOOD AQUACULTURE

When filling out this section refer also to 2.3A and Guidance Note 3.3 for information on Conditions and Documents required with this application type

Proposed Site Location

- (i) Bay: BEIRTREACH BUÍ BAY
- (ii) County: GALWAY
- (iii) OS Map No: O.S. Sheet 51
- (iv) Co-ordinates of Site: (please specify coordinate reference system used e.g. Irish Grid (IG)

(v) Size (hectares): 21.761 Ha

(vi) Species (common and scientific name):

SEAWEED MACRO-ALGAE SPECIES OF THE PHYLUM CHLOROPHYTA (GREEN ALGAE), RHODOPHYTA (RED ALGAE) AND PHAEOPHYTA (BROWN ALGAE) (SEE ANNEX 1 FOR MORE DETAIL).

(vii) What is the source of plantlet?

LICENCED COMMERCIAL AND/OR RESEARCH FACILITIES. OCCASIONALLY WILD PLANTLETS FROM THE LOCALITY MAY BE USED FOR EXPERIMENTAL CULTIVATION IF PLANTLETS ARE NOT AVAILABLE.

(viii) Cultivation Method?

LONGLINE ROPE CULTURE.

(ix) Proposed total number of lines/ropes.

VARIOUS, BUT NOT MORE THAN 1 KM IN TOTAL. THE LOW-TROPHIC GRID HAS CAPACITY FOR 780M IN TOTAL, AN ADDITIONAL 3 X 50M LONGLINES ARE LOCATED ON THE WESTERN SIDE OF THE SITE.

(x) Proposed Production:

N/A SITE IS FOR RESEARCH PURPOSES (SEE ANNEX 1 FOR DETAIL). STOCKING IS ROUTINELY RECORDED ON SITE RECORDS.

Year 1		Year 2		Year 3		Year 4		Year 5	
	for the second for th								
(xi) Reasons for site selection:									
EXISTI	EXISTING LICENCED SITE.								
	(xii) Provide detailed information on the techniques for cultivation in use or to be used. Are these techniques currently in use in the industry or are they new? Please give details;								
THE PRIMARY METHOD OF CULTIVATION IS LONGLINE CULTURE WHICH IS CURRENTLY IN USE. DUE TO THE RESEARCH NATURE OF THE SITE NEW TECHNIQUES WILL BE TRIALLED WHEN REQUESTED.									
(xiii) Me	ethods use	d for harve	esting.						
HAND I	HARVES	ГING, CU	T FROM	THE LON	IGLINES				
(xiv) Ha	s the site s	sufficient s	pace for	the site str	uctures ind	cluding m	ooring blo	ocks?	
YES.	YES.								
Please provide separately detailed drawings of both over and under water structures including moorings. (See Guidance Note on Site Structures 3.3.2)									
(xv) How will the visual impact issues of the flotation devices for the proposed application be addressed?									
LOW IMPACT CAGES AND LONGLINE FLOATS WILL BE USED IN ACCORDANCE WITH BEST PRACTICE.									
				area e.g. Sl 000 site? (I					
If Yes gi	ive details								
	ENT TO (), SAC (0		ARA BO	G COMPI	LEX, A TH	ERRESTF	RIAL SITI	E: SPA	

See Part 2.3A for details of documentation to be included with this application type

2.3A DOCUMENTATION REQUIRED FOR MARINE-BASED SEAWEED/AQUATIC PLANTS/AQUATIC FISH FOOD AQUACULTURE

(to be included separately with a Licence Application for a new site or for a renewal or review of an existing Licence)

- 1. Scale drawing of the structures to be used and the layout of the farm. The proposed site drawings must illustrate all site structures above and below the water including mooring blocks. (recommended scales normally 1:100 for structures and 1:200 for layout) (See Guidance Note 3.3.2 on Site Structures)
- 2. An Appropriate Ordnance Survey Map (recommendation is a map to the Scale of 1:10,000/ 1:10,560, i.e. equivalent to a six inch map). Note: The proposed access route to the site from the public road across tidal foreshore, (e.g. pier or slipway) must also be shown on the map.
- 3. The prescribed application fee (See Guidance Note Section 4)
- 4. If the applicant is a limited Company within the meaning of the Companies Act 1963, as amended, the Certificate of Incorporation and Memorandum and Articles of Association
- 5. If the applicant is a Co-operative, the Certificate of Incorporation and Rules of the Co-operative Society
- 6. Environmental Impact Statement (if required) in certain cases- See Guidance Notes Section 3.3.1

NOW COMPLETE PARTS 2.6, 3, 4 AND 5 PLEASE

2.4 LAND-BASED AQUACULTURE – FINFISH, SHELLFISH, **AQUATIC PLANTS & AQUATIC FISH FOOD**

When filling out this section refer to 2.4A and Guidance Note 3.3 for information on Conditions and Documents required with this application type

Proposed Site Location

1		
(i)	Full address of Townland:	
(ii)	County:	
(11)	County	
(iii)	OS Map No:	
(iv)	Co-ordinates of Site: (please specify coordinate reference system Grid (IG) or Irish Transverse Mercator (ITM) or Latitude/Longitu case specify whether ETRS89 or WG84 etc.]	•
(v)	Size of Site (hectares):	
(vi) Speci	ies (common and scientific name):	
(vii) Prop	osed source of stock for use in the operation?	
	on of ova/fry/parr/smolts or seed into the State or movement of ova/fry/parr/smolts or seed w the Marine Institute as per the Fish Health Authorisation Regulations. (Refer to Guidance N risation)	
(viii) Stat method:	e proposed system of culture e.g. pond, raceway, circular tank, cage	or other
Please stat	te the number and cubic capacity of holding facility	

(ix) Proposed Annual Production:

(x) Reasons for site selection:

(xi) Is the site located in or adjacent to a sensitive area e.g. SPA (Special Protection Area) or SAC (Special Area of Conservation) i.e. a Natura 2000 site? (*Refer to Guidance Note 3.3.1 - Natura 2000 sites*)

If yes give details

(xii) Source of water supply:

(xiii) Estimate dry weather flow (if applicable) of water source in litres/second:

(xiv) Is recirculation of water proposed within the development? YES/NO

If YES provide details of the proposed recirculation system (including water treatment and waste stream components) and describe the % recirculation of source water involved and the target quality criteria thresholds proposed for recirculation of water in the proposed system.

(xv) Are there any possible sources of pollution upstream of the site e.g. discharge from sewage plant, stormwater runoff, farmyard, sheep dip facility, silage effluent, quarry, sandpit or factory? YES/NO

If YES please identify:

See Part 2.4A for details of documentation to be included with this application type

2.4A DOCUMENTATION REQUIRED FOR LAND-BASED AQUACULTURE

(to be included separately with a Licence Application for a new site or for a renewal or review of an existing Licence)

1. Environmental Impact Statement (EIS), if required

Regulation 5 of the Aquaculture (Licence Application) Regulations provides that is mandatory to submit an EIS with certain aquaculture licence applications. The Guidance Note, Section 3.3.1 gives information on the requirement to submit an Environmental Impact Statement.

2. Water Quality Analysis Report.

The Guidance Note, Section 3.3.3 gives information on Water Quality Analysis Report.

The Water Quality Analysis Report must contain information as specified in Annex A of Guidance Note.

- **3. Decision of Planning Authority under the Planning Acts** (See Guidance Note 3.3.3)
- Copy of Licence under Section 4 of the Local Government (Water Pollution) Act, 1977 – Effluent Discharge Licence (See Guidance Note 3.3.3)
- 5. An appropriate Ordnance Survey Map (recommendation is a map to the Scale of 1:10,000 /1:10,560, i.e, the equivalent of a six inch map) showing the location of the site marked in red on which the project will be located
- 6. A sketch of the layout of the site in relation to the river(s), road(s) and building(s)
- 7. Scale drawing of the structures to be used and the layout of the farm in relation to river(s), road(s), and building(s). (recommended scales normally 1:100 for structures and 1:200 for layout)
- 8. The prescribed application fee (See Guidance Note Section 4)
- 9. If the applicant is a limited Company within the meaning of the Companies Act 1963, as amended, the Certificate of Incorporation and Memorandum and Articles of Association
- **10.** If the applicant is a Co-operative, the Certificate of Incorporation and Rules of the Co-operative Society
- 11. Alien Species dossier (where required) See Guidance Notes 3.3.1

Please note that the following conditions must be met in order to allow for consideration of licensing of land-based aquaculture:

- The buildings and equipment must be put in place to the Department's satisfaction
- The operation must comply with Local Authority requirements (See Guidance Note 3.3.3)

NOW COMPLETE PARTS 2.6, 3, 4 AND 5 PLEASE

	2.5 TRIAL LICENCE (To be completed if appropriate)
(See Guidance N	
	erimental or investigative nature of the proposed project:
A TRIAL LICEN	NCE IS NOT BEING APPLIED FOR.
(ii) Outline how _J (a) Stock	performance will be assessed:
(b) Environmenta	al
[Use separate pa	ge if required – all additional pages to be signed and dated]

2.6 Employment, Qualifications, Experience, etc TO BE FILLED IN BY ALL AQUACULTURE APPLICANTS

(i) Please provide details of experience/qualifications of the applicant and any key personnel which are relevant to the aquaculture now proposed:

Dr David Jackson: Over thirty years' experience in aquaculture research. Section Manager of the Aquaculture Section in the Marine Institute. Principle Investigator in many internationally funded research projects. Circa. 150 research related publications including peer reviewed papers, book chapters and national and international reports.

Alan Drumm: Senior Laboratory Analyst. Over 30 years' experience working within Aquaculture. Joined the Salmon Research Trust in 1987 and the Marine Institute in 1999. Currently, managing the Freshwater Rearing Facilities in Newport, Co Mayo and the Marine Research site in Beirtreach Bui, Connemara.

(ii) If a new application please provide details of projected employment creation during first four years of the proposed aquaculture project:

(iii)	In the case	e of a rene	ewal please	provide current	and future details:

		_N/A	
ULLTIME JOBS	5		
Year 1:	Year 2:	Year 3:	Year 4:
ART TIME JOB	S		I
Year 1:	Year 2:	Year 3:	Year 4:

PART 3E DETAILS FOR CONTACT IF DIFFERENT FROM APPLICANT(S)				
Contact in case of enquiries				
Contact Name				
Organisation Name (if applicable)				
Address				
Telephone No.				
Mobile No.				
E-mail Address				

CONFIDENTIAL

PART 3: APPLICANT DETAILS

PART 3 A. INDIVIDUAL(S)/SOLE TRADER(S)

(If necessary continue with extra page(s)

1.

PART 3 B. PARTNERSHIP

PART 3 C. CO-OPERATIVE

PART 3 D. LIMITED COMPANY

CONFIDENTIAL PART 4: FINANCE AND MARKETING

PART 4 A. FINANCE

1.(a) If new application give cost of project (total capital and current costs as at 7 and 8 below): €

(b) If renewal give projected costs for 4 years: € N/A THIS IS A RESEARCH SITE RENEWAL/REVIEW APPLICATION, NOT A COMMERCIAL VENTURE.

2. How will this project be financed (own resources and any other sources)? COMPETITIVE RESEARCH FUNDING.

3. Will this project be your only source of employment	/ income? YES NO X
4. If not, give details: STAFF INVOLVED IN THE RE INSTITUTE, A STATE AGENCY.	SEARCH ARE EMPLOYEES OF THE MARINE
 5. Do you intend to apply for grant aid or other funding (BIM, Udarás na Gaeltachta, FORFÁS, etc.)? 6. If yes, give details: AS A RESEARCH SITE, FUND TOPICS OF RESEARCH CALLS. POTENTIAL NAT DAFM RESEARCH CALLS AND EMFAF ADMINIS INCLUDE THE HORIZON EUROPE PROGRAMME 7. Proposed capital costs of project, including navigation 	YES X NO YES X NO YES ING WILL BE APPLIED FOR DEPENDING ON THE IONAL SOURCES INCLUDED ENTERPRISE IRELAND, STERED BY BIM. INTERNATIONAL SOURCES
Item	Cost €
	Cost E
	<u>Total</u> :
PART 4 A. FINANCE (continued)	
8. Proposed non-capital costs of project (i.e. seed, feed,	labour, etc.):
Item	Cost €
	Total:
9. Provide an estimate of the value of production over t production:	he first (next if renewal) four years based on projected annual

Year 1:	Year2:	Year3:	Year 4:		
10. How many years a expenditure?	from the start of the projec	t will it be before you "bre	eak even", i.e. your income equals your		
11. Give an estimate of	of profitability in the longe	r term, e.g. (5 to 10 years)	:		
		· 1	e projected production plan to full growth and harvest production		
13. If this application relates to an existing site, please set out below the production by quantities on an annual basis for the last 4 years showing stock inputs, growth, survival rates and harvest production					
N/A THIS APPLIC	ATION IS FOR A NON	-COMMERCIAL RESI	EARCH SITE.		
CONFIDENTIAL					
PART 4 B. MARKETING					
1. Have possible markets been considered, or has market advice for products been sought?					
			YES NO x		
2. If yes, give detai	ls:				
 Will the product be If yes, give detail 	e processed or packaged? s:		YES NO X		

PART 5: APPLICATION DOCUMENTATION

The following documents are enclosed with this application: *NB: Refer to Guidance Note Section 3.3 – Guidance on Application Documentation*

No.	DOCUMENTATION	YES	NO	N/A
1a	An appropriate Ordnance Survey Map	\checkmark		
	(recommendation is a map to the scale of			
	1:10,000/10:10,560, i.e., equivalent to a six inch map)			
1b	The proposed access route to the site from the public road across tidal foreshore must also be shown	~		
2a	Scale drawing of the structures to be used	\checkmark		
	(recommended scale normally 1:100 for structures).			
2b	Scale drawing of farm layout (recommended scale normally 1:200 for layout)	~		
3	The prescribed application fee	\checkmark		
4	Environmental Impact Statement (EIS), if required			 ✓
4a	Natura Impact Statement (NIS), if required	✓		
5	Water Quality Analysis Report, if appropriate	\checkmark		
6	Decision of Planning Authority under the Planning Acts, if required			 ✓
7	Copy of Licence under Section 4 of the Local Government (Water Pollution) Act, 1977 – Effluent Discharge, if required			✓
8	If the applicant is a limited Company within the meaning of the Companies Act 1963, as amended, a copy of the Certificate of Incorporation and Memorandum and Articles of Association.			✓
9	If the applicant is a Co-operative, a copy of the			 ✓
	Certificate of Incorporation and Rules of the Co- operative Society			
10	Integrated Pest Management Plan, if required	\checkmark		+
11	Alien Species documentation, if required.			\checkmark

PART 5: DECLARATION AND SIGNING

NB: Refer to Guidance Note Section 3.5 and Section 4 - Guidance on Declaration and Signing and Annual Aquaculture and Foreshore Licence Fees

If this is a renewal/review have you met all licence conditions of the existing aquaculture licence? If applicable, explain why you have not complied with all conditions:

YES, ALL CONDITIONS OF THE EXISTING AQUACULTURE LICENCE HAVE BEEN MET.

I/We hereby declare the information provided in Parts 1, 2, 3 and 4 above to be true to the best of my/our knowledge and that I am over 18 years of age. I/We enclose an application fee* of €190.46 with this application.

Signature(s) of Applicant(s): (Please state capacity of persons signing on behalf of a Company/Co-op) INSPECTOR OF FISHERIES

Date: 26th March 2019

NB All persons named on this licence application must sign and date this application form. Only the existing licence holder(s) can apply for the renewal/review of an Aquaculture Licence.

*Preferred method of payment is by cheque or bank draft. The fee should be made payable to the Department of Agriculture, Food and the Marine.

Refer to Guidance Note Section 4 - Guidance on Aquaculture and Foreshore Licence Fees

The application form should be forwarded, with the required documents and application fee, to:

Aquaculture Licensing Aquaculture & Foreshore Management Division Department of Agriculture, Food and the Marine National Seafood Centre Clonakilty Co. Cork

ANNEX 1 Description of the Project

Background

The Marine Institute holds an aquaculture license for a sea cage site at Lehanagh Pool in Beirtreach Buí Bay (Bertrabuoy Bay) T9/93. This site is of 21.761 hectares and was previously used to conduct research on cod (*Gadus morhua*) for a number of years. The research was supported by a mixture of national (Marine Research Measure, Sea Change, BIM R & D funding and Marine Institute core funding) and international (Inter Reg IIIC) competitive funding.

The Marine Institute successfully applied to have the licence converted into a Multispecies Research License to permit the use of experimental and novel equipment and techniques and to enable the evaluation of multispecies and multi-trophic aquaculture in line with current National and EU policies. To date over €2M has been secured in National and EU funding to enable this research and a number of research projects are underway funded by competitive research funding from the EU Horizon 2020 Programme, EMFF and Enterprise Ireland https://www.marine.ie/Home/site?lehanagh-pool-marine-research-site?language=en.

Current moorings

The moorings have been updated under the current license to ensure that they are in line with best international practice. Six-cage mooring grids are deployed designed to commercial standards based on the Norwegian Standard. The grid is based on fourteen HSS500Kg Plough anchors linked to 38mm open link chain and 56mm 3 strand Powerflex (or similar) rope (as per attached drawing). Shackles and mooring plates are specified in terms of MBLs required by the Norwegian standard. Certified drawings were supplied in line with the *DAFM Structural Design Protocol 2016* prior to installation. Detailed drawings have been supplied with this application.

The wave climate at the site has been demonstrated empirically over the last thirty years of the operation of the site to be relatively benign. The site is sheltered by a combination of islands and shallow bars and is effectively, as the name suggests, a pool which is not subject to storm surges or swells. In order to underpin this information, we have conducted a wave climate investigation using the Marine Institute SWAN model (Appendix I). This confirms that the 6-year mean significant wave height at the mouth of Beirtreach Buí Bay was found to be **1.58** metres and that the wave climate at Lehanagh Pool would be expected to be much more benign than that at the entrance to the bay. The proposed mooring grid has been designed for the much more exposed commercial sites off Irelands west coast and are substantially over specified for this sheltered location.

Mooring Grid and Structures for renewed license

The upgraded mooring currently installed under the existing license will be retained. Under the proposed research license two such grids can be utilised to permit the installation of up to 12 finfish cages and a number of long lines for shellfish and seaweed cultivation. Currently, the site has one mooring grid installed (as described above) allowing up to six 50m circumference net cages on site. At present, five net cages are installed on site together with a pontoon barge. Additional structures include a databuoy (Mobilis DB2000 with twin point mooring) and a low trophic grid. The low trophic grid is annexed to the main mooring grid and consists of two 35m x 60m submerged rectangles with a capacity for 780m of longline total length. Smaller structures (e.g. lantern nets, oyster baskets etc.) will be suspended from these longlines for the cultivation of shellfish species as required. Additionally, smaller 4m³ sentinel net cages can be installed within the larger 50m circumference net cages to facilitate specific trials. Presently, ten sentinel net cages have been used and are stored off-site when not in use. Overall this has reduced the number of licensed structures on the site from an initial (pre-marine Institute) 48 to a maximum of 24. At present, this includes up to a maximum of 12 x 50m circumference finfish cages, 1 x low-trophic grid (as described above), 1 x pontoon (see drawings for detail), 1 x data buoy and 3 x 50m longlines on the western side of the site. As the site is for research purposes, the size and configuration of the structures is smaller than those of the commercial equivalents. The sentinel cages and small shellfish cultivation equipment (e.g. lantern nets, oyster baskets) are not considered as structures. Photographs of the main structures can be found in Appendix II.

Visual Impact

The current site has been in operation for over thirty years. It is in fact one of the earliest licensed finfish aquaculture sites in south Connemara. As such, the site and the structures thereon are part of the existing built landscape, in much the same way as the local roads, buildings and stone walls. The proposed renewal will not alter the area the aquaculture structures have occupied for the last thirty years. The conversion to a research licence had two main effects on visual impact. Firstly, the number of permitted structures was reduced from 48 to 24. Secondly as the structures are for research use and not commercial production they are in general smaller and less visually obtrusive. In addition to this, half of the structures deployed are essentially sub surface in nature. Taken together with the reduction in the number of structures and their small size this has the effect of reducing the visual impact to a fraction of that of the previously licensed 48 fin fish cages. This is consistent with the provisions of Section 101 of the Sea Fisheries and Maritime Jurisdiction Act 2006 on the deployment of novel or experimental equipment where visual impact should be no greater than that which existed prior, in this case 48 fin fish cages. The site is not adjacent to any major roads or scenic viewing points.

Proposed Research, program of work

The Research License has permitted the site to support a wide range of research, including research into sea lice management strategies, basic research on fish welfare and IMTA (integrated multi-trophic aquaculture).

The site is to be utilised as a multi-species site using:

• Finfish: such as fish of the Families Gadidae e.g. Atlantic cod *Gadus morhua*; Salmonidae e.g. Atlantic salmon *Salmo salar*; Mugilidae e.g. grey mullet *Mugil cephalus*; Labridae e.g. Ballan wrasse *Labrus bergylta*; and Cyclopteridae e.g. lumpfish *Cyclopterus lumpus*,

- Molluscan shellfish of the Class Bivalvia such as e.g. blue mussel *Mytilus edulis*, King scallop *Pecten maximus*, Variegated scallop *Chlamys varia*, European flat oyster *Ostrea edulis*;
- Echinoderm animals such as e.g. Purple sea urchin *Paracentrotus lividus*, Black sea cucumber *Holothuria forskali*;
- Crustaceans such as e.g. European lobster *Homarus gammarus*;
- Seaweed macro-algae species in the Phylum Chlorophyta (green algae), Rhodophyta (red algae) and Phaeophyta (brown algae).

All species to be used on site are naturally occurring in Ireland.

The total standing biomass currently licensed at the site for fin-fish will not be exceeded (and in accordance with SI 464 of 2016) and stocking of the site with a mix of species will be contingent on an approved fish health management plan and an approved SBM plan being in place prior to each such stocking.

The site forms part of a national aquaculture research infrastructure and is currently used to support a number of national and internationally funded research projects (https://www.marine.ie/Home/site-area/infrastructure-facilities/lehanagh-pool-marine-research-site?language=en), in association with project partners in both Irish third level institutions and partners in other EU states. As such it is a valuable part of the States marine research infrastructure.

The exact type and configuration of the cages, structures and longlines may vary from time to time as the nature of the research evolves. In line with current protocols any proposed changes will be notified to DAFM for approval prior to deployment and all structures will be designed to best international practice and fit for purpose.

Natura

A comprehensive screening exercise was carried out for potential impacts on adjacent Natura sites in December 2016. A screening document of the potential impacts of the proposed aquaculture licence (AQ176) variation on the listed features and species of all SAC's and SPA's in the environs of Beirtreach Buí Bay is appended (Appendix III). The document assesses the likely significant effects of the proposed fish farm upon the Habitats and species elements of the Natura site network. Aquaculture license AQ176 is not located within a designated SPA. The desktop review of potential linkages and analysis of spatial overlap indicated with high confidence that the proposed amendment to licence AQ176 would not have any significant impact on any SCI bird species of the adjacent SPA's. Aquaculture license AQ176 is not located within a designated SAC. The desktop review of potential linkages and analysis of spatial overlap indicate with high confidence that the proposed amendment to licence AQ176 would not have any significant of spatial overlap indicated species of the adjacent SAC's.

Management and disposal of stocks

The site will be used for research purposes only and as such the stocks cultivated thereon will not directly give rise to harvested tonnage for commercial production

destined to enter the human food chain. The care and husbandry of animals used in the course of research is governed by *EU directive 2010/63/EU* and *S.I. No. 543 of 2012* (as amended) and the site is fully authorised, under this legislation, by the Health Products Regulatory Authority (HPRA) under authorisation number AE19121. The care, husbandry and slaughter of all stocks will be in full compliance with this legislation and subject to regular audits from HPRA. This is in addition to the normal rules governing the husbandry of aquaculture animals.

A fish health management plan will be in place and in the event of a disease outbreak the protocols as set out in the *Contingency Plan for diseases of fish as required under Council Directive 2006/88/E*, (MI Publication 2014) (Appendix IV) will be adhered to. Carcases will be disposed of by rendering in an EPA and DAFM approved Category 1 rendering plant as appropriate. As the site is relatively distant from all adjacent commercial fin-fish production sites the risk of cross infection is considered very low, even from the nearest production site in Beirtreach Buí Bay (see map).


Summary of license requested:

Research license to cultivate fin-fish, shellfish and marine macro-algae.

Site co-ordinates:

Irish Grid (Easting and Northing)

078664, 240493	to Irish National Grid Reference point
079061, 240707	to Irish National Grid Reference point
079320, 240266	to Irish National Grid Reference point
079054, 240119	to Irish National Grid Reference point
078820, 240220	to the first mentioned point

Site area: 21.761 hectares.

Species to be cultivated:

The site is to be utilised as a multi-species site using:

- Finfish: such as fish of the Families Gadidae e.g. Atlantic cod *Gadus morhua*; Salmonidae e.g. Atlantic salmon *Salmo salar*; Mugilidae e.g. grey mullet *Mugil cephalus*; Labridae e.g. Ballan wrasse *Labrus bergylta*; and Cyclopteridae e.g. lumpfish *Cyclopterus lumpus*,
- **Molluscan shellfish** of the Class Bivalvia such as e.g. blue mussel *Mytilus edulis*, King scallop *Pecten maximus*, Variegated scallop *Chlamys varia*, European flat oyster *Ostrea edulis*;
- Echinoderm animals such as e.g. Purple sea urchin *Paracentrotus lividus*, Black sea cucumber *Holothuria forskali*;
- Crustaceans such as e.g. European lobster *Homarus gammarus*;
- Seaweed macro-algae species in the Phylum Chlorophyta (green algae), Rhodophyta (red algae) and Phaeophyta (brown algae).

All species to be used on site are naturally occurring in Ireland.

Stocking and outputs: Maximum biomass not to exceed 100 tonnes, annual harvest output not to exceed 50 tonnes of fin-fish.

Note: as the stocks will be used for research it is not envisaged that there will be any significant harvested output.

Structures and moorings; Two mooring grids to accommodate a maximum of 24 structures (cages and long-lines as appropriate) for the conducting of field research as per attached technical drawings.

Appendix I

Wave climate at Lehanagh Pool

The Marine Institute run an operational wave model based on the SWAN (Simulating Waves Nearshore) modelling code which simulates the wave climate for all Irish waters at 0.025 degrees horizontal resolution. The model has been validated using measured data from the weather and wave buoys situated around the Irish coast and has been found to simulate the wave climate with good skill. The model has been operational since mid 2010.

In an effort to provide an estimate of the wave climate at the proposed aquaculture site in inner Beirtreach Buí Bay, an analysis was carried out on 6 years of data from the model grid point located closest to the proposed site. As can be seen from Figure 1 the model grid point is actually at the <u>entrance</u> to Beirtreach Buí Bay rather than at the proposed site. This is because the SWAN model does not have a high enough horizontal resolution to simulate the climate within the bay itself.

Table 1 shows the annual mean and max <u>significant wave height</u> (Hs) for the chosen model grid point. The 6-year mean was found to be **1.58** metres and the maximum Hs was **3.74** metres.

However, these values need to be put in context. The proposed site at Lehanagh Pool is in a much more sheltered location than the relatively exposed location of the model grid point used to calculate these statistics. The topography of Beirtreach Buí Bay and the shallower waters of the bay would be expected to have a significant impact on the wave climate of a location at the eastern end of the bay so the wave climate at Lehanagh Pool would be expected to be much more benign than that at the entrance to the bay. Given this, the significant wave height statistics quoted here are very likely to be significantly less at Lehanagh Pool.



Figure 1: Locations of proposed aquaculture site at Lehanagh Pool in inner Beirtreach Buí Bay and the closest SWAN grid point located at the entrance to Beirtreach Buí Bay

Year	Mean Hs (m)	Max Hs(m)
2011	1.67	3.58
2012	1.36	3.54
2013	1.52	3.72
2014	1.68	3.74
2015	1.81	3.69
2016	1.60	3.67

Table 1: Annual mean and max Hs (significant wave height) at Beirtreach Buí model point

Appendix II

Examples of structures currently in use at Lehanagh Pool (T9/93).

Visual of the site from the shore.



The Marine Institute Lehanagh Pool Research Site (T09/93)





50m circumference net pens with bird nets, at Lehanagh Pool.

Sentinel cage set-up within a larger 50m net pen.





The low-trophic grid for seaweed and shellfish cultivation trials.

Data buoy at Lehanagh Pool.



Seaweed longline at Lehanagh Pool.



Oyster baskets for shellfish cultivation trials at Lehanagh Pool.





Lantern nets (left) and oyster trays (right) for suspended culture of shellfish.

Appendix III

Screening statement

Aquaculture license AQ176 variation - Lehannah Pool in Beirtreach Buí Bay (Bertraghboy Bay).

December 2016

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1.0 Introduction

This document represents a screening document of the potential impacts of the proposed aquaculture licence (AQ176) variation on the listed features and species of all SAC's and SPA's in the environs of Bertraboy Bay. The document assesses the likely significant effects of the proposed fish farm upon the Habitats and species elements of the Natura site network.

Article 6(3) of the Habitats Directive (92/43/EEC) states that 'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.'

For the purposes of this document Natura 2000 sites are those identified as sites of community importance designated under the Habitats directive (Special Areas of Conservation (SAC's), and sites designated under the Birds Directive (Special Protection Areas (SPA's))

The proposed fish farm could potentially affect the following Natura sites;

- Connemara Bog Complex SPA (004181)
- Slyne head to Ardmore Point Islands SPA (004159)
- Inishmore Island SPA (004152)
- Connemara Bog Complex SAC (002034)
- Kilkieran Bay and Island SAC (002111)
- Slyne Head Islands SAC (000328)
- Inishmore Island SAC (000213)
- West Connaught Coast SAC (002998)

The document has been prepared by BIM on behalf of the project proponent (Marine Institute) and should be cited as:

BIM (2016) Screening statement - Aquaculture license AQ176 variation - Lehannah Pool in Beirtreach Buí Bay (Bertraghboy bay).

2.0 Methodology

The methodology used in this assessment is devised with reference to the EU guidance documents on the methodology of an appropriate assessment (EC, 2001) and the national guidance, "Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities", (DEHLG, 2009). This document defines Screening as the process which identifies the likely effects of a plan or project, either alone or in combination with other projects or plans, upon a Natura 2000 site and considers whether these impacts are likely to be significant.

3.0 **Project Description**

The Marine Institute holds an aquaculture license AQ176 for a sea cage site at Lehannah Pool in Beirtreach Buí Bay (Bertraghboy Bay). This site is of 23.3 hectares and has been used to conduct research on cod (*Gadus morhua*) for a number of years. The research was supported by a mixture of national (Marine Research Measure) and international (InterReg IIIC) funding.

The Marine Institute is seeking a variation of the license in order to use the site to support a wider range of research, including research into sea lice management strategies, basic research on fish welfare and IMTA (integrated multi-trophic aquaculture). They are seeking permission to use the site as a multi-species site using fin-fish {cod, salmonids and cleaner fish of the wrasse family (Labridae) and lumpsucker (*Cyclopterus lumpus*) shellfish {blue mussels and or other bivalves and possibly sea urchins or crustaceans} and seaweed {marine macro-algae of the genera *Alaria, Laminaria* etc.}.

The site was originally licensed to hold salmon and this was amended to permit the culture of cod in 2010. The license permits the use of up to 48 cages at the site. The Marine Institute are currently updating the moorings, in line with best international practice, to accommodate six cages moored in a grid as per attached drawing. Two such grids will be installed to permit the installation of up to 12 fin fish cages and a number of long lines for shellfish and seaweed cultivation, up to a maximum of 12. This would reduce the number of licensed structures on site from the current 48 to 24. As the site is for research purposes the size and configuration of the structures will be smaller than those of the commercial equivalents.

There is no proposal to alter the current licensed standing biomass for fin-fish (100 tonnes) and the Marine Institute expect that stocking of the site with a mix of species would be contingent on an approved fish health management plan and an approved SBM plan prior to each such stocking.

The plan is to use the site in the coming years to support a number of projects (including the IMTA proposal mentioned above), in association with project partners in both Irish third level institutions and partners in other EU states. It will also be used to support a major international project TAPAS which has received €7million from the EU under Horizon 2020. As such it will be a valuable part of the States marine research infrastructure.

The exact type and configuration of the cages and longlines will vary from time to time as the nature of the research evolves. In line with current protocols any proposed changes will be notified to DAFM for approval prior to deployment and all structures will be designed to best international practice and fit for purpose.

4.0 Brief description of the Natura 2000 sites

4.1 Site Synopses

All site descriptions and conservation objectives were extracted directly from the NPWS site synopsis databases.

Accessed 09/12/2016

4.1.1 Connemara Bog Complex SPA (004181)

The Connemara Bog Complex SPA is a large site encompassing much of the south Connemara lowlands of Co. Galway. The site consists of three separate areas - north of Roundstone, south of Recess and north-west of Spiddal. It is underlain predominantly by a variety of igneous and metamorphic rocks including granite, schist, gneiss and gabbro.

The whole area was glaciated during the last Ice Age which scoured the lowlands of Connemara. The Connemara Bog Complex SPA is characterized by areas of deep peat surrounded by heath-covered rocky outcrops. The deeper peat areas are often bordered by river systems and the many oligotrophic lakes that occur, resulting in an intricate mosaic of various peatland/wetland habitats and vegetation communities; these include Atlantic blanket bog with hummock/hollow systems, inter-connecting pools, Atlantic blanket bog pools, flushes, transition and quaking mires, as well as freshwater marshes, lakeshore, lake and river systems.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Cormorant, Merlin, Golden Plover and Common Gull.

The SPA is located approximately 6km from the licenced site under consideration

4.1.2 Slyne head to Ardmore Point Islands SPA (004159)

The site includes a number of islands in 5 clusters along the Connemara coast, Co. Galway, from Slyne Head to Kilkieran Bay. It is characterised by a large number of small, uninhabited islands, rocks and skerries. Some of the islands are up to 4 km from the mainland, whilst others are in very shallow waters close to the shoreline. The larger islands in the site include Inishlackan, Croaghnakeela Island, St Macdara's Island, Masson Island, Birmore Island, Freaghillaun, Illaunamid and Illaunurra. Most of the larger islands support maritime grassland; machair occurs on Masson Island. The surrounding seas to a distance of 200 m, which are used as foraging areas by terns and other seabirds, are included within the site.

The SPA is of high ornithological importance as it supports an internationally important Barnacle Goose population. It also has nationally important populations of three tern species, including the largest breeding population of Arctic Tern in the country. Barnacle Goose, Sandwich Tern, Arctic Tern, Little Tern, Common Tern and Roseate Tern are all listed on Annex I of the of the E.U. Birds Directive.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Barnacle Goose, Sandwich Tern, Arctic Tern and Little Tern. The islands within the site support an internationally important wintering population of Barnacle Goose. The islands used by the geese include St Macdara's Island, Croaghnakeela Island, Illaunacroagh More, Illaunacroagh Beg, Inishmuskerry and Birmore Island.

Inishlackan and Freaghillaun are the closest islands in the SPA to the licenced area under consideration (Approximately 7km)

4.1.3 Inishmore Island SPA (004152)

Situated approximately 8 km off the south coast of County Galway, Inishmore (Árainn) is the largest of the three Aran Islands. The site comprises all of the cliffs and rocky shore along the entire southern side of the island, part of the low cliffs/rocky shore at the west end, and the low cliffs/rocky shore at the east end - a distance of over 17 km of coastline. Also included are the two islands west of Inishmore (Brannock Island and Rock Island), Straw Island at the east end of Inishmore, the dune system at Barr na Coise, and the adjacent seas. The cliffs vary in height between 20m and 80m and in angle. Littoral and sublittoral reef communities are well-developed within the site

The Inishmore SPA is an important site for breeding seabirds, with four migratory species having populations of national importance. Of note is that two of the seabird species, Arctic Tern and Little Tern, as well as the resident Peregrine and Chough, are listed on Annex I of the E.U. Birds Directive.

The SPA is located approximately 27km from the licenced site under consideration

4.1.4 Connemara Bog Complex SAC (002034)

The Connemara Bog Complex is a large site encompassing the majority of the south Connemara lowlands, Co. Galway. The site is bounded to the north by the Galway- Clifden road and stretches as far east as the Moycullen-Spiddal road. Because of its large size the site contains a wide range of habitats. Extensive tracts of western blanket bog form the core interest, but there are also areas of heath, woodland, lakes, rivers and streams.

The Connemara Bog Complex encompasses a large area of relatively undamaged lowland Atlantic blanket bog of high conservation significance both in Ireland and at a European level. The site also contains good examples of at least 13 other habitats listed on Annex I of the E.U. Habitats Directive, as well as four species listed in Annex II. Further, the site supports a number of threatened and protected plant species. The site is internationally important for Cormorant and nationally important for Greenland Whitefronted Goose, and contains nesting sites for Golden Plover.

Atlantic salmon, a species listed under Annex II of the E.U. Habitats Directive, occurs in many of the rivers within the site. The Cashla and Ballynahinch systems are good examples of western acidic spate rivers which support the species. Good spawning and nursery grounds for the species occur in these systems.

The SAC is located approximately 1km from the licenced site under consideration.

4.1.5 Kilkieran Bay and Island SAC (002111)

Kilkieran Bay and Islands SAC is located just north of Galway Bay and extends from Keeraun Point, south of Carraroe, westwards to Mace Head, west of Carna, all in Co. Galway. The site contains a large area of open marine water, many islands and rocky islets, and the coastline is much indented with a series of bays (notably the interconnected Kilkieran Bay and Greatman's Bay), channels and inlets. The entrances of the bays face the prevailing south-westerly winds and they are subject to strong tidal streams as the sea funnels between islands and through channels. A number of streams, lakes and lagoons drain into the bays. The bedrock of the site is igneous, composed of granite, felsite and other intrusive rocks rich in silica. Generally, the site has a rocky shoreline which in most places gives way to mud in shallow water. The surrounding land is dominated by lowland blanket bog, with rock outcrops and small hills to the north.

Kilkieran Bay and Islands is an extensive coastal complex site that is of high conservation value, particularly for the fine examples of marine and terrestrial E.U. Habitats Directive Annex I habitats that it supports and for its important Slender Naiad, Otter, seal and seabird populations.

The islands and islets of Kilkieran Bay, mainly those on its western side, are important for their colonies of seabirds, particularly breeding terns - Arctic Tern, Common Tern and Little Tern. All of these tern species are listed on Annex I of the E.U. Birds Directive. Inishmuskery, and probably other islands, are used by a population of Barnacle Goose in winter, a species that is also listed on Annex I of the Birds Directive. Eagle Rock is of interest for its population of Black Guillemot. The site also supports colonies of gulls - Herring Gull, Great Black-backed Gull and Black-headed Gull.

The SAC is located approximately 12km by sea from the licenced site under consideration.

4.1.6 Slyne Head Islands SAC (000328)

This site comprises a long archipelago of islands, islets, rocks and reefs located off the western shores and south-western tip of the Slyne Head Peninsula in Co. Galway. The surrounding shallow marine areas are also included as part of the site. The islands are mostly low-lying and have a covering of a grassy maritime turf. A few sandy coves occur on the larger islands, along with shingle. The islands are uninhabited apart from an automated lighthouse on Illaunamid.

This site is an important example of exposed low-lying western islands with good examples of reefs, a significant grey seal population and important colonies of breeding birds.

The SAC is located approximately 24km from the licenced site under consideration

4.1.7 Inishmore Island SAC (000213)

The site is selected for lagoon, fixed dune, machair, orchid-rich grassland and limestone pavement, all priority habitats on Annex I of the E.U. Habitats Directive. The site is also selected as a candidate SAC for other habitats listed on Annex I of the directive – lowland hay meadows, perennial vegetation of stony banks, reefs, sea cliffs, shifting dunes, Marram dunes, dune slack, dunes with Creeping Willow, marine caves, alpine heath and dry heath. In addition, the site is also selected as a candidate SAC for Vertigo angustior, a snail species listed on Annex II of the E.U. Habitats Directive.

The SAC is located approximately 28km by sea from the licenced site under consideration.

4.1.8 West Connaught Coast SAC (002998)

This site consists of a substantial area of marine waters lying off the coasts of Counties Mayo and Galway in the west of Ireland. Comprising two parts, in its northern component the site extends from the coastal waters off Erris Head westwards beyond Eagle Island and the Mullet Peninsula in Co. Mayo. From there it extends southwards immediately off the coast as far as the entrance to Blacksod Bay.

In its southern component, the site stretches from Clare Island and the outer reaches of Clew Bay at Old Head and continues southwards off the Mayo coast to the Connemara coast near Clifden and Ballyconneely, Co Galway. Predominantly coastal in nature, the site extends westwards into Atlantic continental shelf waters up to approximately 7-11 km from the mainland; although in its southern component it remains mostly inshore of the main islands: Clare Island, Inishturk, Inishbofin and Inishshark. Its area contains subtidal waters fringing these and other islands, as well as islets and rocky skerries off the Co. Mayo and Co. Galway coasts.

The waters of the West Connacht Coast represent an exceptional area of key conservation importance for Bottle-nosed Dolphin in Ireland.

The northern component of the SAC is located approximately 70 km from the licenced site under consideration.

The southern component of the SAC is located approximately 37km by sea from the licenced site under consideration.

4.2 Conservation Objectives

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- 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.

The favourable conservation status of a species is 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, and
- 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.

In addition to the general objectives above the protection areas under consideration in this screening statement have either generic or specific conservation objectives developed by the NPWS, these are listed in Table 1 below

Table 1 Conservation Objectives

NATURA SITE	CONSERVATION OBJECTIVES	
Connemara Bog Complex SPA (004181)	• To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: Cormorant <i>Phalacrocorax</i> <i>carbo</i> , Merlin <i>Falco columbarius</i> , Golden Plover <i>Pluvialis apricaria</i> , Common Gull <i>Larus canus</i> (NPWS (2016a))	
Slyne head to Ardmore Point Islands SPA (004159)	• To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: Barnacle Goose, Sandwich Tern, Arctic Tern Sterna, Little Tern Sterna (NPWS (2016b))	
Inishmore Island SPA (004152)	• To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: Kittiwake <i>Rissa tridactyla</i> , Arctic Tern <i>Sterna paradisaea</i> , Little Tern <i>Sterna albifrons</i> , Guillemot <i>Uria aalge</i> ((NPWS (2016c))	
Connemara Bog Complex SAC	Detailed conservation objectives have been developed for this SAC, all the following objectives are supported by a list of attributes and targets (NPWS (2015a));	
(002034)	• To maintain the favourable conservation condition of coastal lagoons	
	• To maintain the favourable conservation condition of reefs	
	• To maintain the favourable conservation condition of oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)	
	• To maintain the favourable conservation condition of oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i>	
	• To maintain the favourable conservation condition of Natural dystrophic lakes and ponds	
	• To maintain the favourable conservation condition of Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	
	• To restore the favourable conservation condition of Northern Atlantic wet heaths with <i>Erica tetralix</i>	
	• To restore the favourable conservation condition of European dry heaths	
	• To maintain the favourable conservation condition of Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	
	• To restore the favourable conservation condition of Blanket bogs	
	• To restore the favourable conservation condition of transition mires and quaking bogs	
	• To restore the favourable conservation condition of depressions on peat substrates of the <i>Rhynchosporion</i>	
	• To restore the favourable conservation condition of Alkaline fens	
	• To maintain the favourable conservation condition of Old sessile oak woods with Ilex and <i>Blechnum</i> in the British Isles	
	• To maintain the favourable conservation condition of Marsh Fritillary	
	• To restore the favourable conservation condition of Atlantic Salmon	
	• To maintain the favourable conservation condition of Otter	
	• To maintain the favourable conservation condition of Slender Naiad	

Island SAC (002111)) objectives are supported by a list of attributes and targets (NPWS (2014));	
	• To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide	
	• To maintain the favourable conservation condition of Coastal lagoons	
	• To maintain the favourable conservation condition of Large shallow inlets and bays	
	• To maintain the favourable conservation condition of Reefs	
	• To restore the favourable conservation condition of Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	
	• To restore the favourable conservation condition of Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	
	• To restore the favourable conservation condition of Machairs	
	• To maintain the favourable conservation condition of Lowland hay meadows (<i>Alopecurus pratensis, Sanguisorba officinalis</i>)	
	• To restore the favourable conservation condition of Otter	
	• To maintain the favourable conservation condition of Harbour Seal	
	• To maintain the favourable conservation condition of Slender Naiad	
Slyne Head Islands SAC (000328)	Detailed conservation objectives have been developed for this SAC, both objectives are supported by a list of attributes and targets (NPWS (2012));	
	• To maintain the favourable conservation condition of Reefs	
	• To maintain the favourable conservation condition of Grey Seal	
Inishmore Island SAC (000213)	Detailed conservation objectives have been developed for this SAC, all the following objectives are supported by a list of attributes and targets (NPWS (2015b));	
	• To maintain the favourable conservation condition of coastal lagoons	
	• To maintain the favourable conservation condition of reefs	
	• To maintain the favourable conservation condition of perennial vegetation of stony banks	
	• To maintain the favourable conservation condition of vegetated sea cliffs of the Atlantic and Baltic coasts	
	• To maintain the favourable conservation condition of embryonic shifting dunes	
	• To maintain the favourable conservation condition of shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes')	
	• To restore the favourable conservation condition of fixed coastal dunes with herbaceous vegetation ('grey dunes')	
	• To maintain the favourable conservation condition of dunes with <i>Salix repens ssp. argentea</i> (<i>Salicion arenariae</i>)	
	• To maintain the favourable conservation condition of humid dune slacks	
	• To restore the favourable conservation condition of Machairs	
	• To maintain the favourable conservation condition of European dry heaths	
	• To maintain the favourable conservation condition of semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>)	
	• To maintain the favourable conservation condition of lowland hay meadows (<i>Alopecurus pratensis, Sanguisorba officinalis</i>)	
	• To maintain the favourable conservation condition of Limestone pavements	
	• To maintain the favourable conservation condition of Submerged or partially submerged sea caves	
	• To maintain the favourable conservation condition of Narrow-mouthed Whorl Snail	
	The status of Alpine and Boreal heaths as a qualifying Annex I habitat in Inishmore	

Island SAC is currently under review. The outcome of this review will determine whether a site specific conservation objective is set for this habitat

West Connaught Coast SAC (002998)) A detailed conservation objective have been developed for this SAC, the following objective is supported by a list of attributes and targets (NPWS (2015c));

• To maintain the favourable conservation condition of Common Bottlenose Dolphin

5.0 Analysis of Listed Annex I habitats and Annex II species

The characteristic features of SPA and SAC sites list are identified in Table 2 where a preliminary screening is carried out by means of a desktop review and the likely interaction with aquaculture activities based upon spatial overlap.

NATURA SITE	QUALIFYING FEATURES [CODE]	AQUACULTURE SCREENING
Connemara Bog Complex SPA	Cormorant <i>Phalacrocorax</i> <i>carbo</i> [A017]	Connemara Bog Complex SPA is of high ornithological importance, in particular for its nationally important breeding populations of Cormorant in particular at Lough Scannive, located within Roundstone Bog approximately 10km from aquaculture licence AQ176
(004181)		The aquaculture license AQ176 is located approximately 6km from the edge of this terrestrial SPA, but is located within the foraging range of this species (A maximum foraging distance of 35 km has been recorded for this species. The mean of all the maximum foraging ranges recorded by different studies is 2 25 km (Thaxter et al, 2012)).
		However as with any predator, cormorants attempt to catch the necessary food with minimum effort (energy expenditure) at maximum perceived security. In energetic terms, flying 'costs' are at least eight times – and diving six times – than the birds' resting metabolism. The choice of feeding sites is therefore particularly governed by a) the distance they are from the roost or nesting area, b) fish densities, and c) the experience with certain prey and foraging sites.
		Given the small area occupied by the proposed aquaculture license in comparison with the foraging range of the species and the distance from the protected site, it is regarded as extremely unlikely that any interactions with aquaculture activities at Aquaculture licence AQ176 will be of a significant level – excluded from further analysis
	Merlin <i>Falco columbarius</i> [A098]	Connemara Bog Complex SPA is of high ornithological importance, in particular for its nationally important breeding populations of Merlin
		This species is typical of upland areas during breeding season (Documented foraging range is within 5km of nest site during the breeding season (SNH, 2013)). The aquaculture licence AQ176 is located approximately 6km from this terrestrial SPA and thus is outside the range of this species during the breeding season.
		Merlin are much more widely distributed in the winter. They move away from high ground and can often be seen on the coast, where concentrations of other birds are attractive as prey species
		However given the small area occupied by the proposed aquaculture it is regarded as extremely unlikely that any interactions with aquaculture activities at Aquaculture license AQ176 will be of a significant level – excluded from further analysis
	Golden Plover <i>Pluvialis</i> <i>apricaria</i> [A140]	Connemara Bog Complex SPA is of high ornithological importance, in particular for its nationally important breeding populations of Golden Plover. Golden plover breed in heather moors, blanket bogs & acidic grasslands where there is no spatial overlap with the proposed project.
		Throughout the winter, Golden Plovers are regularly found in large, densely-packed flocks, and in a variety of habitats, both coastal and inland. This species feeds on d on a variety of soil and surface-living invertebrates and thus if utilising Berthraboy bay with be limited to intertidal and coastal feeding.
		No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis

Table 2 Qualifying features and screening

NATURA SITE	QUALIFYING FEATURES [CODE]	AQUACULTURE SCREENING
	Common Gull <i>Larus canus</i> [A182]	Connemara Bog Complex SPA is of high ornithological importance, in particular for its nationally important breeding populations of Common Gull, this SPA is approximately 6km from the protected sites but is within foraging range of this species (During the breeding season the mean-maximum foraging range of common gull has been estimated at 50 km (Thaxter et al., 2012)).
		Common gulls typically feed on farmland, playing fields, estuaries and in coastal waters, and are relatively uncommon offshore (Forrester et al., 2007). The main prey items of common gull are aquatic and terrestrial invertebrates which are obtained by direct foraging and also food piracy (BWPi, 2009).
		Given the small area occupied by the proposed aquaculture license in comparison with the foraging range of the species and the distance from the protected site, it is regarded as extremely unlikely that any interactions with aquaculture activities at Aquaculture licence AQ176 will be of a significant level – excluded from further analysis
Slyne head to Ardmore Point	Barnacle Goose (<i>Branta leucopsis</i>) [A045]	Inishlackan and Freaghillaun are the closest islands in the SPA to the licenced area under consideration (Approximately 7km). Neither of these Islands is described as important for this species.
Islands SPA (004159)		In addition this species is primarily a grazer, feeding on grasses and sedges on the tundra during the breeding season, and on coastal pastures during the winter.
		There is no spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Sandwich Tern (<i>Sterna</i> sandvicensis) [A191]	Inishlackan and Freaghillaun are the closest islands in the SPA to the licenced area under consideration (Approximately 7km).
		This aquaculture site is within the foraging range of this species (49 km mean- maximum foraging range) but the spatial overlap of the site is extremely small in comparison to this range.
		Given the small area occupied by the proposed aquaculture license in comparison with the foraging range of the species and the distance from the protected site, it is regarded as extremely unlikely that any interactions with aquaculture activities at Aquaculture licence AQ176 will be of a significant level – excluded from further analysis
	Arctic Tern (Sterna paradisaea) [A194]	Inishlackan and Freaghillaun are the closest islands in the SPA to the licenced area under consideration (Approximately 7km).
		This aquaculture site is within the foraging range of this species (24.2 km mean- maximum foraging range) but the spatial overlap of the site is extremely small in comparison to this range.
		Given the small area occupied by the proposed aquaculture license in comparison with the foraging range of the species and the distance from the protected site, it is regarded as extremely unlikely that any interactions with aquaculture activities at Aquaculture licence AQ176 will be of a significant level – excluded from further analysis
	Little Tern (Sterna albifrons) [A195]	Inishlackan and Freaghillaun are the closest islands in the SPA to the licenced area under consideration (Approximately 7km).
		Eglington (2013), in a literature review of foraging ecology of terns, concluded that most studies, including those citing anecdotal information, reported a foraging radius less than 4km from the colony. Therefore there is no spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
Inishmore Island SPA	Kittiwake Rissa tridactyla, [A182]	Inishmore island SPA is distant from the licenced area under consideration (Approximately 27km).
(004152)		Kittiwake have a foraging range of approximately 60km, but given the small area occupied by the proposed aquaculture license in comparison

NATURA SITE	QUALIFYING FEATURES [CODE]	Aquaculture Screening
		with the foraging range of the species and the distance from the protected site, it is regarded as extremely unlikely that any interactions with aquaculture activities at Aquaculture licence AQ176 will be of a significant level – excluded from further analysis
	Arctic Tern (Sterna	Inishmore island SPA is distant from the licenced area under consideration (Approximately 27km).
	paradisaea) [A194]	Aquaculture license AQ176 is beyond the typical foraging range of this species (24.2 km mean- maximum foraging range) Therefore there is no spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Little Tern (Sterna albifrons) [A195]	Inishmore island SPA is distant from the licenced area under consideration (Approximately 27km).
		Eglington (2013), in a literature review of foraging ecology of terns, concluded that most studies, including those citing anecdotal information, reported a foraging radius less than 4km from the colony. Therefore there is no spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Guillemot Uria aalge [A199]	Inishmore island SPA is distant from the licenced area under consideration (Approximately 27km).
		Guillemot have a foraging range of approximately 84km, but given the small area occupied by the proposed aquaculture license in comparison with the foraging range of the species and the distance from the protected site, it is regarded as extremely unlikely that any interactions with aquaculture activities at Aquaculture licence AQ176 will be of a significant level – excluded from further analysis
Connemara Bog Complex SAC (002034)	Coastal lagoons [1150]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Reefs [1170]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Natural dystrophic lakes and ponds [3160]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Northern Atlantic wet heaths with Erica tetralix [4010]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	European dry heaths [4030]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Molinia meadows on calcareous, peaty or clayey- silt-laden soils (Molinion caeruleae) [6410]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis

NATURA SITE	QUALIFYING FEATURES [CODE]	Aquaculture Screening
	Blanket bogs (* if active bog) [7130]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Transition mires and quaking bogs [7140]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Depressions on peat substrates of the Rhynchosporion [7150]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Alkaline fens [7230]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Euphydryas aurinia (Marsh Fritillary) [1065]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Salmo salar (Salmon) [1106]	The following attributes contribute to the conservation objectives of this feature in the Connemara bog complex SAC;
		• Distribution (in freshwater)
		• Adult spawning fish (Conservation limits in freshwater)
		• Fry abundance (freshwater)
		Out-migrating smolt abundance
		• Number and distribution of redds (in freshwater)
		• Water Quality (in freshwater)
		The aquaculture licence AQ176 under consideration is for research purposes and thus there is no proposal to alter the current licensed standing biomass for fin-fish (100 tonnes) and the Marine Institute expect that stocking of the site with a mix of species would be contingent on an approved fish health management plan and an approved SBM plan prior to each such stocking.
		However in line with commercial sites, Site AQ176 will operate in accordance with DAFM's Integrated Pest Control Strategy (IPCS) for controlling sea lice, all Irish marine salmon farms are obliged to allow the Marine Institute to monitor for sea lice infestations on an ongoing basis and to take remedial action when necessary. This process involves the inspection and sampling of each year class of fish at all active marine fish farm sites up to fourteen times per annum in accordance with an agreed National Protocol. The four main purposes of the National Sea Lice Monitoring Plan are:
		• To provide an objective measurement of infestation levels on farms;
		• To investigate the nature of the infestations;
		• To provide management information to drive implementation of the control and management strategies; and
		• To facilitate further development and refinement of the control and management strategies.
		The management strategies employed work to reduce the development of infestations and to ensure the most effective treatment of developing infestations. They minimise lice levels whilst controlling reliance on, and reducing use of, veterinary medicines.
		The effectiveness of this protocol in managing the risk to wild salmonids has been assessed twice by DG Environment. DG environment in its response to the complainant FIE, stated that "the Irish sea lice monitoring and control system is unique in the world in terms of its comprehensive nature, the fact that all results are made publicly available and that all inspections are carried out by independent state inspectors".

NATURA SITE	QUALIFYING FEATURES [CODE]	AQUACULTURE SCREENING
		The principles of the control system are also in line with those recommended in risk assessments of other salmon growing areas (Serra-Llinares et al., 2014).
		The site synopsis states that – "Atlantic Salmon, a species listed under Annex II of the E.U. Habitats Directive, occurs in many of the rivers within the site. The Cashla and Ballynahinch systems are good examples of western acidic spate rivers which support the species. Good spawning and nursery grounds for the species occur in these systems" Both systems are in the south of the SAC remote from the proposed development and both Owenmore and Cashla rivers are currently exceeding their conservation limits (The target in the Conservation objectives)
		Thus considering current regulatory requirements and that the attributes listed for this species are specific to freshwater and/or confined to the southern portion of the SAC (migration from Cashla and Owenmore Rivers) and are therefore, sufficiently far removed such that interaction with aquaculture activities at AQ 176 are highly unlikely. This attribute is excluded from further analysis.
	Lutra lutra (Otter) [1355]	The following attributes contribute to the conservation objectives of this feature in the Connemara bog complex SAC;
		• Distribution (assume terrestrial, marine and freshwater)
		• Extent of terrestrial habitat
		• Extent of marine habitat
		• Extent of freshwater (river) habitat
		• Extent of freshwater (lake/lagoon) habitat
		Couching sites and holts
		Fish Biomass available
		SAC is located approximately 1km from Aquaculture license AQ176, therefore the site is outside the typical foraging range of this species. This assertion is linked to the objectives for the site which states that that otters tend to forage within 80m of the shoreline (NPWS, 2015a)
		No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Najas flexilis (Slender Naiad) [1833]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
Kilkieran Bay and Island SAC (002111)	Mudflats and sandflats not covered by seawater at low tide [1140]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Coastal lagoons [1150]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Large shallow inlets and bays [1160]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Reefs [1170]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Mediterranean salt meadows (Juncetalia maritimi) [1410]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Machairs [21A0]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Lowland hay meadows (Alopecurus pratensis,	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis

NATURA SITE	QUALIFYING FEATURES [CODE]	AQUACULTURE SCREENING
	Sanguisorba officinalis) [6510]	
	Otter [1355]	The following attributes contribute to the conservation objectives of this feature in the Kilkieran Bay and Islands SAC;
		• Distribution (assume terrestrial, marine and freshwater)
		• Extent of terrestrial habitat
		• Extent of marine habitat
		• Extent of freshwater (river) habitat
		• Extent of freshwater (lake/lagoon) habitat
		Couching sites and holts
		Fish Biomass available
		Barriers to connectivity
		SAC is located approximately 12km by sea from Aquaculture license AQ176, therefore the site is outside the typical foraging range of this species. This assertion is linked to the objectives for the site which states that that otters tend to forage within 80m of the shoreline (NPWS, 2015a)
		No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Harbour Seal [1365]	The following attributes contribute to the conservation objectives of this feature in the Kilkieran Bay and Islands SAC;
		Access to suitable habitat
		Breeding behaviour
		Moulting behaviour
		Resting behaviour
		• Disturbance
		SAC is located approximately 12km from Aquaculture license AQ176, all attributes and measures are site and spatial specific to the site.
		No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Najas flexilis (Slender Naiad) [1833]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
Slyne Head Islands SAC (000328)	Reefs [1170]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
\$¥	Halichoerus grypus (Grey Seal) [1364]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
Inishmore Island SAC (000213)	Coastal Lagoons [1150]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Reefs [1170]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Perennial Vegetation of Stony Banks [1220]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Vegetated Sea Cliffs [1230]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Embryonic Shifting Dunes [2110]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Marram Dunes (White	No spatial overlap or likely interactions with aquaculture activities at

NATURA SITE	QUALIFYING FEATURES [CODE]	AQUACULTURE SCREENING
	Dunes) [2120]	Aquaculture license AQ176- excluded from further analysis
	Fixed Dunes (Grey Dunes) [2130]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Dunes with Creeping Willow [2170]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Humid Dune Slacks [2190]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Machairs [21A0]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Dry Heath [4030]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Alpine and Subalpine Heaths [4060]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Orchid-rich Calcareous Grassland [6210]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Lowland Hay Meadows [6510]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Limestone Pavement [8240]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Sea Caves [8330]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
	Narrow-mouthed Whorl Snail (Vertigo angustior) [1014]	No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis
West Connaught Coast SAC	<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349]	The following attributes contribute to the conservation objectives of this feature in the Kilkieran Bay and Islands SAC;
(002998)	Dolphin) [1349]	• Access to suitable habitat
		• Disturbance
		The northern component of the SAC is located approximately 70 km from the licenced site under consideration.
		The southern component of the SAC is located approximately 37km by sea from the licenced site under consideration.
		No spatial overlap or likely interactions with aquaculture activities at Aquaculture license AQ176– excluded from further analysis

6.0 Cumulative Assessment

All aquaculture activities (Licenced and application) in Bertraghboy Bay are considered as part of the cumulative assessment.

Aquaculture activities include:

- 4 salmon sites (Inclusive of AQ176)
- 3oyster sites
- 1 seaweed application

Extent of areas and activities are presented in Table 3 below

Table 3 Spatial extent of activities in the bay

FEATURE	AREA IN HA
Area of Bay (Inside a line from Gorteen Pt. to Mace Head)	4650
Designated areas (Inishlackan and Freaghillaun and surrounding buffer as part of Slyne head to Ardmore Point Islands SPA)	283
Finfish Aquaculture (Including AQ176)	65
Oyster Aquaculture	11
Seaweed Aquaculture (Application)	62

Spatial overlaps are presented in Table 4 below

Table 4 Percentage overlap

FEATURE	OVERLAP %
Aquaculture in Bay	3%
Finfish Aquaculture in Bay	1.4%
Oyster Aquaculture in Bay	0.24%
Seaweed Aquaculture	1.33%
Aquaculture on designated areas	0

The cumulative assessment indicates no disturbing impacts on protected species, aquaculture in the bay is at a low level (3%) and there is no spatial overlap on any protected features.

7.0 Outcomes

Aquaculture license AQ176 is not located within a designated SPA. The desktop review of potential linkages and analysis of spatial overlap indicate with high confidence that the proposed amendment to licence AQ176 will not have any significant impact on any SCI bird species of the adjacent SPA's. Therefore the proposal is excluded from further analysis

Aquaculture license AQ176 is not located within a designated SAC. The desktop review of potential linkages and analysis of spatial overlap indicate with high confidence that the proposed amendment to licence AQ176 will not have any impact on the protected features and species of the adjacent SAC's. Therefore the proposal is excluded from further analysis

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Appendix IV

Contingency Plan for diseases of fish as required under Council Directive 2006/88/EC

Fish Health Unit Marine Institute www.fishhealth.ie

January 2014

ISBN: 978-1-902895-55-0

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Foreword

The purpose of the following Contingency Plan is to describe the roles, responsibilities, reactions and resources that have been identified as critical to successfully managing outbreaks of listed diseases of farmed fish in Irish waters. The Plan follows the criteria as laid down in Article 47 of Council Directive 2006/88/EC. The Contingency Plan also describes the hierarchy and reporting structure of the National Disease Strategy Group and the National Control Centre and provides supporting procedural guidelines for reaction scenarios.

In compiling this document, the Marine Institute acknowledges the invaluable input and cooperation from all members of the Aquaplan Steering Committee including industry representatives, Vet Aqua International and Global Trust Certification. In addition, the willingness of the Australian Chief Veterinary Officer to allow access to the comprehensive material presented in the Australian AQUAVET Plan is gratefully acknowledged. Finally, we would like to acknowledge the guidance and input provided by Paddy Rogan CVO (retired) who has given very willingly of his time and experience in working with the Marine institute to complete this document.

This Contingency Plan is a working document and is intended to be used in association with other resource documents/forms as detailed in the Appendices. It will be subject to continual review and will be revised at least every five years to maintain its effectiveness, to improve its usefulness and to reflect any new developments in national and EU legislation. Fish Health Unit

Marine Institute January 2014

Introduction

Article 47 of Council Directive 2006/88/EC requires Member States to draw up contingency plans for emerging and exotic diseases of aquaculture animals. Whilst there is no legal imperative to draw up contingency plans for non-exotic diseases of aquaculture animals or for those diseases for which Ireland has national measures under Article 43 of Directive 2006/88/EC, it has been decided that it is logistically important to have plans in place to deal with the non-exotic diseases VHS, IHN, ISA and KHV as well as the diseases BKD, and SVC for which Ireland has national measures. Details of these diseases are outlined below: DISEASES LISTED IN ANNEX IV, PART II OF DIRECTIVE 2006/88/EC

DISEASE SUSCEPTIBLE SPECIES

Epizootic haematopoietic necrosis (EHN) Rainbow trout and redfin perch Viral haemorrhagic septicaemia (VHS) Herring, whitefish, pike, haddock, Pacific cod, Atlantic cod, Pacific salmon, rainbow trout, rockling, brown trout, turbot, sprat, grayling Infectious haematopoetic necrosis (IHN) Chum salmon, coho salmon, Masou salmon, rainbow or steelhead trout, sockeye salmon, pink salmon, Chinook salmon. Atlantic salmon Koi herpes virus (KHV) Common carp and koi carp Infectious salmon anaemia (ISA) Rainbow trout, Atlantic salmon, brown trout and sea trout DISEASES FOR WHICH IRELAND HAS NATIONAL MEASURES UNDER ARTICLE 43 OF DIRECTIVE 2006/88/EC DISEASE SUSCEPTIBLE SPECIES

Spring viraemia of carp (SVC) Bighead carp, goldfish, Crucian carp,

Grass carp, common carp, koi carp, silver carp,

sheathfish, tench

Bacterial kidney disease (BKD) Family: Salmonidae

Infection with Gyrodactylus salaris * Atlantic salmon, rainbow trout, Arctic char,

North American brook trout, grayling, North

American lake trout, brown trout

*National measures under Article 43, are also in place for the parasite *Gyrodactylus salaris* but a separate Plan has been devised to deal with that pathogen.

The objective of the current Plan is to:

specify the measures required to maintain high levels of disease awareness and preparedness,

ensure environmental protection and

define the measures to be implemented in the event of an outbreak of an emerging disease.

The criteria for drawing up the plan for emerging and exotic diseases are set out in Council Directive 2006/88/EC, Article 47. This framework has also been used to create the contingency plan for the other diseases outlined above.

The detailed procedures to be followed in the event of a suspected or confirmed disease outbreak are set out in the Plan.

This contingency plan will be reviewed and updated as required, at least every five years.

1. Legal Powers

1.1 The statutory powers for the control of a listed or emerging disease are contained in S.I.(261 of 2008 European Communities (Health of Aquaculture Animals and Products) Regulations (Regs. 11, 12, 13, 14, 15, 41) as amended by S.I. No 398 of 2010 and S.I.No.430 of 2011.

1.2 This S.I. also includes legislation on authorisation, transport, identification, slaughter of infected fish, contact sites and fallowing. Statutory powers for the notification of increased mortalities and control of movements are also contained in S.I.261 of 2008 (as amended).

2. Financial provisions

2.1 Application has been made to have fish included in the budgetary provisions which exist within the Department of Agriculture, Food and the Marine (DAFM), to deal with supplementary funding required to cover disease outbreaks in terrestrial animals. This funding would cover personnel costs, the cost of equipment and consumables and where necessary, the cost of slaughter, destruction and sanitation.

2.2 Compensation payments

Council Decision 90/424/EC on Expenditure in the Veterinary Field provides for compensation for the eradication of diseases listed in Council Directive 2006/88/EC. Matching national funding is however, required to allow draw down of funds via the EFF (European Fisheries Fund) although this is not currently provided for in S.I.261 of 2008 (as amended).

3. Personnel and the Chain of Command

3.1 The Marine Institute is the State Agency tasked with implementing the contingency plan. Depending on the circumstances, the Institute may request assistance from other state bodies such as the Department of Agriculture, Food and the Marine; the Sea Fisheries Protection Authority or Inland Fisheries Ireland. A collaborative arrangement is already in place between the MI and DAFM Veterinary Services Division, in relation to veterinary inspections under Directive 2006/88/EC. The Marine Institute has established a National Disease Strategy Group (NDSG) which is responsible for the implementation of this contingency plan. The NDSG shall comprise of the following:

Chief Executive of the Marine Institute (MI) or his nominee (Chair) Director of the Marine Environment & Food Safety Division (MEFS, MI) Head of the Fish Health Unit (MI)

Epidemiologist (Centre for Veterinary Epidemiology and Risk Analysis) / DAFM DAFM veterinarian (to be nominated by the Chief Veterinary Officer) Veterinary representative from NI Authorities – when disease outbreak has a potential impact on the disease status of NI

Principal Officer with responsibility for fish health issues (DAFM)

Principal Officer in charge of Inland Fisheries Division (DCENR) - when the outbreak has the potential to impact freshwater fisheries.

3.2 The NDSG will have the following functions: Where cases of listed and Article 43 diseases are suspected; activating the contingency plan. This activation automatically triggers the establishment of the
National Control Centre (NCC)

In the case of an emerging disease situation, following the flow chart outlined in Annex 1. If the outcome of this process indicates the emerging disease is infectious and the risk is perceived to be high, the contingency plan is activated.

Overseeing the implementation of the contingency plan.

Securing the financial and other resources required to implement the contingency arrangements.

Appointing the head of the National Control Centre.

Working with the Head of the NCC and the Co-ordinator of the NCC to assess the response to the disease outbreak, taking account of the factors outlined in Annex 2. 3.3 The NDSG will meet, as necessary, during any suspected or confirmed outbreak and shall convene once a year to review preparedness of these contingency arrangements. The NDSG will be chaired by the CEO of the MI or his nominee.

3.4 The head of the National Control Centre (NCC) will be appointed by the NDSG and will normally be the Director of MEFS (MI).

3.5 Other representatives on the NCC committee will be FHU Administration and DAFM Veterinary Inspectors working with the FHU (or other personnel who may be appointed from DAFM/SFPA/IFI if required).

3.6 The responsibilities of the NCC will be the practical implementation of the contingency plan i.e.

Investigating suspected disease outbreaks

Carrying out epizootic investigations

Assisting with the taking of samples of fish, or other materials and submitting them for laboratory analysis

Advising on areas to be subject to designation

Determining control measures to be implemented including movement restrictions and prohibitions

Applying the disease control measures in accordance with the EC (Health of Aquaculture Animals & Products) Regulations 2008 and the detailed contingency arrangements set out in this document

Ensuring compliance with all controls which are applied

Supervising disinfection and cleaning programmes

Making arrangements for the disposal of dead fish

Liaising with bodies such as the EPA in respect of treatments and waste disposal Initiating immediate contact with other fish farmers or fishery owners to introduce

preventative measures to minimise and control the spread of disease

Responding to technical enquiries relating to the disease

Providing regular summary reports to NDSG members on the disease situation Making and issuing restriction notices, withdrawing restriction notices and issuing general and specific licenses

Advising on fish disease policy

Ensuring that the MI Press Officer is fully briefed so that she can ensure Ministers, Press Officers, other government departments and the public where relevant, are kept fully informed of developments

Administering the NCC and working with the NDSG to ensure that the resources and facilities necessary for the effective operation of the contingency plan are provided Liaising with Legal Services Division, as required.

3.7 To ensure effective implementation of the contingency plan, representatives from the NCC will have regular and open communication with:

Managers and veterinarians of farms/companies involved

Executive secretary of farmers organisation (IFA Aquaculture) Representatives from other relevant State Agencies 3.8 In addition, a co-ordinator for the NCC will be appointed, based at the MI in Rinville, Oranmore, Co. Galway and contact details will be as follows: *Contact* Fiona Geoghegan *Fax* 091 387201 *Email* Fiona.geoghegan@marine.ie *Mobile (24 hours)* 087 2490105

An organogram showing the composition of the NDSG and the NCC as well as their relationship with each other is shown in Annex 3.

3.9 The MI Communications Section shall provide media services and will take the lead responsibility for issuing final press releases and dealing directly with the media. A press release might be issued under the following circumstances:

To announce confirmation of disease

To announce imposition of restrictions where lab results are positive

To announce removal of restrictions

To give a general overview of the spread of the disease and the measures being taken to deal with it

To announce the setting up of national and local control centres

To announce decisions on containment and/ or eradication plans

To announce the provision of advice to stakeholders

To announce any trade restrictions

To advertise helplines, websites etc. where information will be available

To advertise general disease control measures

3.10 The Head of the NCC and the NCC coordinator will take responsibility for:

Working with the NDSG to consider the factors outlined in Annex 2 and assess the appropriate disease response

Notifying industry and farmers organisations (contact details Annex 4) Liaising with interested parties, external to the NCC

Notifying the European Commission (DG SANCO) at appropriate stages during the incident process

Briefing the Minister and Administrative teams dealing with all incoming enquiries and consider a web page/bulletin board if appropriate.

3.11 An epidemiological investigation must be initiated without delay. Should the investigation reveal possible risk to wild fish in waterways, the Director of Field Operations at IFI should be contacted (Annex 4).

3.12 The role of the NCC is considered to be ended when procedures for either longterm management or eradication of the disease risk have been implemented, a final report completed, and the handling of the incident reviewed.

4. National Control Centre (NCC)

4.1 In the initial phase of a disease outbreak, it is likely that the NCC will be located at the Marine Institute (MI) premises at Oranmore, however, where circumstances dictate, for example if there are several outbreaks or if the infected premises are too far from

MI HQ; alternative premises will be chosen and designated as the Local Disease Control Centre (LDCC). Suitable premises have been identified in each finfish farming area.

These are as follows: Marine Institute office, Killybegs, Co. Donegal Marine Institute office, Rossaveal, Co. Galway Marine Institute office, Bantry, Co. Cork Marine Institute office, Dunmore East, Co. Wexford Marine Institute office, Clogher Head, Co. Louth 4.2 A meeting room and a laboratory in the MI HQ have been identified as the potential NCC and will be equipped as follows: Telephones Fax machine Computer hardware and software with broadband internet access Maps and navigation charts Advice leaflets, posters and signs Contact lists List of fish farms in the area Equipment (fish anaesthetic, diagnostic sampling kits, disposable protective clothing, disinfectant, disinfectant sprayers)

5. Environmental co-ordination

5.1 Established contacts exist between the MI and the Environmental Protection Agency (EPA). If a listed or emerging disease is confirmed, the EPA and Local Authorities (where appropriate), will be consulted as necessary re carcass disposal and/or discharges from the infected site.

5.2 The aim will be to minimise:

risk to soil, air, surface or ground water, plants and animals nuisance from noise or odours

6. Resources (personnel, laboratory, equipment)

6.1 During an unfolding disease emergency it may be necessary to quickly deploy staff and equipment to LDCCs. This will be the responsibility of the NCC co-ordinator based in the MI. An investigative team will be sourced initially from 1) current Fish Health Unit personnel and DAFM Veterinary Inspectors working to the FHU, 2) current MI and DAFM personnel, 3) retired MI & DAFM staff, 4) private veterinary practitioners and 5) fish health professionals/veterinarians from other EC member states. Administrative staff will be sourced primarily from the MI. If additional staff are required then these will be sourced initially from DAFM and then potentially from other government departments. As far as field capabilities are concerned, DAFM VIs, the SFPA and the IFI Officials are authorised under S.I.No. 261 of 2008 (as amended) and as such will be available to assist MI Fish Health Inspectors in obtaining appropriate samples from both farmed and wild fish, and in enforcing any statutory controls that may be required.

6.2 The MI maintains a list of veterinary and technical staff that can be called upon if there is a disease outbreak and maintains a list of staff details including name, address, telephone number, grade, line manager.

Those experienced in the operation of a NCC are listed in Annex 5.

6.3 The number of staff required to operate a NCC or a LDCC will be dictated by the number of outbreaks and the size of the containment area.

6.4 The staff will include;

administrative personnel capable of dealing with the management of disease emergencies and persons trained in the maintenance of record systems veterinarians/fish health professionals trained in finfish disease diagnosis, slaughter, disinfection and other procedures at infected premises, the operation of movement controls and other restrictions

technical support staff capable of dealing with implementing appropriate procedures at infected premises, the operation of movement controls, etc. 6.5 MI Human Resources Section will collaborate with the HR Department of DAFM to establish pay rates for privately employed, non-MI/DAFM staff and will review them

annually. 6.6 When arranging staff deployment it is important to allow for rest periods. Staff must have at least one day off per week.

6.7 Staff duties must be clearly defined at local level. The required number of each stream (veterinary/technical and administration) will be decided by the MI, in the context of the extent of the outbreak.

6.8 Accommodation, training (including an initial rapid briefing session), and supply of equipment will be the responsibility of the FHU, MI.

6.9 Equipment resources in the event of a disease outbreak should have a minimum of the items listed in Annex 6. These will be in addition to the sampling equipment required for disease diagnosis and investigation (sample kits and equipment for parasitology, histopathology, bacteriology, molecular biology and virology) and there should be sufficient equipment to allow at least two suspect cases to be investigated simultaneously. This list will be reviewed annually by the MI. These kits will be stored at the MI (NDCC) but be ready to be sent to the LDCC very quickly if required.

7. Response options

7.1 In the event of confirmation of the presence of a listed or serious emerging disease on an aquaculture site in Ireland, the advice from the NDSG and the NCC may be to commence immediate destruction of the fish on the infected site. Under certain circumstances, risk assessment may however, allow some of the fish from the infected site to be on-grown for a limited period of time under prescribed conditions.

7.2 In such cases, fish from an infected site may only be harvested in a processing plant which has been authorised under Article 4.2 of Council Directive 2006/88/EC. Harvest bins used to bring fish from the infected site to the authorised processing plant should be leak-proof, lined with polythene bags and have secure lids and bindings. Bins should not be overfilled to prevent spillage of blood in transit. Vehicles used to transport harvest bins should be fitted with a collection system and sump to collect any spillage. Trucks should carry disinfectant and drivers should be trained in the use of equipment and chemicals to be applied in the case of a spillage.

7.3 Any wellboat used to transport fish must travel with closed wells when carrying infected fish. Fish must be transferred directly from the wells and not held in pens at the processing plant prior to harvest. Wellboat water should either pass through the processing plant effluent treatment system prior to discharge or be disinfected before supervised discharge from the boat. This should only happen once the boat is more than one tidal excursion or 5km away from any fish farm site.

7.4 All transporters must be registered with the Marine Institute as required under S.I. 261 of 2008.

8. Culling and disposal of livestock

8.1 There will be different options available for removal of the affected stock depending on their life stage, biomass and holding units as well as the disease affecting them. In the case of small biomass and juvenile fish in a contained tank unit which are not for direct human consumption then options for euthanasia include (i) overdose with anaesthetic or (ii) stunning by electrical current or (iii) physical means. For fish in a large freshwater pond systems portable electrofishers₁ could be utilised or alternatively fish seine netted out and stunned manually or stunned by using the onsite stunning machine if available. For a large biomass of fish in semi-open pen systems then fish should be moved to the slaughter house/harvest station in a closed well boat and slaughtered by percussive stunning, electrical stunning (or pharmacological means e.g. anaesthetic overdose, where the fish are not destined for human consumption). The welfare of the fish should remain of high priority during any emergency and veterinary supervision will be required. The recommendations of the European Food Safety Authority should be adhered to through any emergency cull₂. 8.2 With regard to anaesthetic use, the bath water used should be retained in a suitable container to allow degradation of MS222 by sunlight for a minimum of 30 days following which the residue may be disinfected and disposed of in soil away from water courses. Such disposal will require an EPA waste license. Alternatively, activated carbon is effective in removing MS222 from water and anaesthetic bath water could be pumped through a carbon filter.

8.3 The NCC will recommend means for carcass disposal. This will depend on the nature of the pathogen and quantity of biomass. Communication with the EPA has indicated that rendering at a Class I Animal By-Products facility is the best option. They have advised that landfill should be the last option considered and that it is not legal to bury carcasses in a greenfield site. When an existing landfill site is to be considered, any movement of material would require a waste collection permit and the acceptance of the material at landfill would require operator agreement and EPA approval.

8.4 Containers used for holding any mortalities or culled fish prior to processing must be leakproof and any transporter must carry documentation detailing the origin and details of the material for disposal. Labels should be adhered to the containers, indicating that the contents are not for human consumption.

8.5 Where a factory is to process fish from an infected site as well as those from uninfected sites, there must be separation of delivery days for the different categories of carcass (infected or uninfected) and all items and equipment (including harvest bins, trucks, protective clothing) involved in the delivery of infected stock must be cleaned with a degreasing agent and then disinfected in accordance with manufacturers recommendations.

9. Disinfection

9.1 Cleaning and disinfection procedures will be vital to preventing the spread of disease. For that reason, a Decontamination Manual has been devised to provide guidance in relation to this matter [See Annex 7.]

10. Movement restrictions

10.1 Where a listed or serious emerging disease is suspected or confirmed, livestock must not be moved to another site without the permission of the MI. The only situation where such movement may be considered by the MI is (a) in accordance with a Movement Permit [see Annex 8], where the site to which the stock are proposed to be moved is also affected by the same disease or (b) for harvest in accordance with a Harvesting License [see Annex 8]. However, in either case, the fish should not be moved unless they are clinically healthy.

The management and control of infected, suspect and other relevant sites is dealt with as outlined in Annex 9.

11. Fallowing

11.1 Fallowing or resting a site between livestock crops can break infection cycles and

allow restoration of the local environment. The mandatory fallowing period for each disease will be laid down by the Commission. Until such time as that occurs, the fallow period for all listed diseases except ISA, is at the discretion of the Competent Authority. According to Commission Decision 2003/466/EC, the mandatory fallow period for a site infected with ISA is at least 6 months.

11.2 Fallowing should start immediately after site cleaning and disinfection. This is carried out after removal of all susceptible species of aquatic animals and removal of water in which infected stocks were reared, where feasible. Equipment and other materials contaminated or otherwise able to harbour infection should be removed and be subject to cleaning and disinfection.

11.3 Once the fallow period has expired, the site can be restocked and will then be subject to a surveillance program appropriate to the disease. Stocking with sentinel fish prior to full re-stocking may also be considered.

12. Surveillance following restocking

12.1 Any farm or site which has been exposed to a listed disease or has been a contact for such a farm or is in the same water body as an affected farm, and has either culled or harvested and then fallowed and restocked should be subject to disease surveillance. Surveillance levels may be prescribed by the EU or the MI depending on the disease. Draft legislation is being drawn up by DG SANCO and until this is finalised, the regime that was in place under Directive 91/67/ECC (Commission Decisions 2001/183/EC and 2003/466/EC) should be used.

13. Training programmes and awareness

13.1 Training for MI staff, DAFM Vets, SFPA, private veterinary practitioner, etc., is as follows:

refresher courses on listed and emerging finfish diseases as well as control, biosecurity and disinfection are organised by the MI.

training of farm, veterinary, technical and administrative staff at a local level is arranged by the MI and BIM.

laboratory staff are seconded to reference laboratories in the EC for refresher training in new diagnostic tests and equipment.

field exercises (announced and unannounced) may be scheduled.

14. Public awareness

14.1 The MI has organised awareness exercises through lectures presented at the annual Fish Health Seminars which are open to all interested parties. The threat of the introduction of exotic fish diseases through the import of fish stocks is highlighted by public notices/announcements at points of entry to the country. Additional posters warning of the dangers of exotic fish diseases are displayed at angling clubs, fisheries, veterinary offices, fish processors, public aquaria and other locations. The target audience is primarily tourists, fishermen, anglers, fish farmers, fish hobbyists, aquarists and private veterinary practitioners.

14.2 Press releases would be prepared in the event of an emerging disease outbreak and information and advice given via TV/radio/newspaper, MI website, as required.

15. Rendering plants

15.1 As outlined above, rendering is the preferred option for disposal of carcases. The relevant rendering plant must be approved by the EPA and DAFM to handle infected carcases.

Ireland has one Category 1 rendering plant which handles fish carcasses. This is College

Proteins, in Nobber, Co. Meath (capacity 3000 tonnes/week) (details in Annex 10 Rendering plant contact details).

There are 3 further Cat 1 plants which do not currently take fish but which could be contacted in an emergency situation. These are as follows:

Dublin Products, Dunlavin, Co. Kildare.

Waterford Proteins, Ferrybank, Co. Waterford.

Ecosafe Systems, Kylemore Road, Dublin 10.

16. Resources and further reading

Department of Agriculture, Fisheries and Forestry (2008). Operational Procedures Manual Decontamination (Version 1.0) Australian Aquatic Veterinary Emergency Plan (Aquavetplan), Australian Government Department of Agriculture, Fisheries and Forestry, Canberra, ACT.

DAFF (2003) Foot and mouth disease contingency plan. DAFF, Dublin. 40pp DAFF (2004) Classical swine fever contingency plan for Ireland. DAFF, Dublin. 62pp DEFRA (2008) Contingency plan for exotic animal diseases. Framework response plan.

DEFRA, London, UK 139pp

DEFRA (2008) Contingency plan for combating *Gyrodactylus salaris* in England. DEFRA, London, UK 26pp

D I Fraser, P D Munro and D A Smail (2006) Disinfection guide version IV. Practical steps to prevent the introduction and minimise transmission of diseases of fish. Fisheries Research Services Internal Report no. 13/06. Aberdeen, UK

O.I.E. (2009) Aquatic Animal Health Code. OIE, Paris, France

D.A. Smail, R. Grant, D.Simpson, N.Bain,T.S.Hastings (2004) Disinfectants against cultured infectious salmon anaemia (ISA) virus: the virucidal effect of three iodophors, chloramine T, chlorine dioxide and peracetic acid/hydrogen peroxide/acetic acid mixture. *Aquaculture*, 240, 29 – 38



Data Protection Notice:

Part A:

Information applicable to all Department of Agriculture, Food and the Marine customers:

- The Department of Agriculture, Food and the Marine is fully committed to keeping all personal data submitted by its customers, fully safe and secure during administrative processes. All necessary technical measures have been put in place to ensure the safety and security of the systems which hold this data. Department staff are also considered as customers of the Department from a Data Protection perspective and may exercise their data protection rights in the same way.
- 2. Transparency and openness in the use of personal data held is important to the Department and therefore we aim to fully inform all our customers about the purpose(s) for which their data will be used and why, where it may be shared elsewhere, and why and how long their data may be held by the Department. Information on the rights of customers will also be provided.
- The current legislation for Data Protection in Ireland is the Data Protection Act 1998 as amended by the 2003 Data Protection Act. The General Data Protection Regulations (EU 2016/679) will come into effect on 25 May 2018.
- The Data Controller for the collection and processing of all personal data in the Department of Agriculture, Food and the Marine is the Department itself, as a legal entity.
- 5. The Data Protection Officer can be contacted as follows:

Data Protection Officer Data Protection Unit, Corporate Affairs Department of Agriculture, Food and the Marine Grattan Business Park, Dublin Road, Portlaoise, Co Laois. Email: <u>dataprotectionofficer@agriculture.gov.ie</u>

- 6. Personal data processed by the Department will only be used for the specific purpose(s) as outlined when the data is collected, or in later communications, and will only be used in accordance with the Data Protection legislation in force.
- 7. Rights of the individual in relation to personal data held by the Department: When you, as a customer, provide personal data to the Department you have certain rights available to you in relation to that data. These rights are outlined below and can be exercised by contacting the Data Protection Officer, as detailed above, indicating which right(s) you wish to exercise:

Currently our customers have the following rights (up to 24 May 2018):

- access to their data
- rectification of their data
- erasure of their data
- right to lodge a complaint with the Supervisory Authority

From 25 May 2018 onwards all Department customers will also have the following <u>additional</u> rights:

- restriction of processing
- data portability
- objection to processing
- withdraw consent if they previously gave it in relation to processing of their personal data
- relating to automated decision making, including profiling

Part B – Information specific to the personal data being collected

The following information is specific to the personal data processed for *Aquaculture and Foreshore Licence applications*:

8. Specified purpose:

The personal data sought from you, the applicant, is required for the purpose of making a determination on an application for an Aquaculture and Foreshore licence. Failure to provide all the personal data required to facilitate the processing of the

application, including data testing, will result in the Department being unable to process the application.

9. Legal basis:

Applications for Aquaculture and Foreshore Licences are processed pursuant to the following legislation:

Fisheries (Amendment) Act 1997 (as amended)

Foreshore Act 1933 (as amended)

S.I. No. 236/1998 - Aquaculture (Licence Application) Regulations, 1998 (as amended)

S.I. No. 270-1998 - Aquaculture (Licence Application and Licence Fees) Regulations, 1998

EU Habitats Directive of 92/43/EEC

EU Birds Directive 79/409/EEC

Consolidated Environmental Impact Assessment Directive 2011/92/EU and Directive 2014/52/EU

Public Participation Directive (Aarhus Convention)

10. Recipients:

If an Environmental Impact Assessment (EIA) Screening is required, the above legislation provides that the following agencies will participate and are provided with details of your application as part of this process:

- Bord Iascaigh Mhara
- Marine Institute.

The following consultees are contacted by the Department to provide observations on your licence application:

- Bord lascaigh Mhara
- Marine Institute
- the Minister for Culture, Heritage and the Gaeltacht
- the Minister for Housing, Planning and Local Government
- the Minister for Communications, Climate Action and Environment
- Udaras na Gaeltachta, if the proposed aquaculture is to take place in, or contiguous to, its functional area
- the Local Authority, within whose functional area, or contiguous to whose functional area, the proposed aquaculture is to take place
- Fáilte Eireann
- Inland Fisheries Ireland (IFI)
- the Commissioners of Irish Lights
- An Taisce The National Trust for Ireland
- a Harbour Authority within the meaning of the Harbours Act, 1946, or a company established under the Harbours Act, 1996, as appropriate, if the proposed aquaculture is to take place in, or contiguous to, its functional area.
- Irish Water
- Sea Fisheries Protection Authority
- Marine Survey Office of the Minister for Transport, Tourism and Sport.

Details pertaining to your aquaculture and foreshore licence application, and the determination, are published in local newspapers, Iris Oifigiúil, and on the Department's website, as required under the Public Participation Directive (Aarhus Convention).

Aquaculture Licences Appeals Board (ALAB)

In the event of the Aquaculture Licences Appeals Board (ALAB) receiving an appeal of the Minister's decision on whether or not to grant you an aquaculture and foreshore licence, your file, containing personal details, will be forwarded by the Department to ALAB to make a decision on the appeal.

The Aquaculture Licences Appeals Board is an independent authority for the determination of appeals against decisions of the Minister on aquaculture licence applications.

11. Transferred outside the EU:

Information you provide as part of your Aquaculture and Foreshore licence application is not currently transmitted outside of the EU.

12. Retention Period:

The data collected for this purpose will be held by the Department only as long as the legal purpose(s) for which it was collected apply. After this time it will be marked for destruction in accordance with legal obligations under the National Archives Act 1986, and associated permissions received from the National Archives Office in this regard.

13. Data provision being statutory or contractual obligation:

The data provided for this purpose is requested under the requirements of the following legislation:

Fisheries (Amendment) Act 1997 (as amended)

Foreshore Act 1933 (as amended)

S.I. No. 236/1998 - Aquaculture (Licence Application) Regulations, 1998 (as amended)S.I. No. 270-1998 - Aquaculture (Licence Application and Licence Fees)Regulations, 1998

EU Habitats Directive of 92/43/EEC

EU Birds Directive 79/409/EEC

Consolidated Environmental Impact Assessment Directive 2011/92/EU and Directive 2014/52/EU

Public Participation Directive (Aarhus Convention)

The client is obliged under law to provide this information to enable the Aquaculture and Foreshore Management Division to process applications for Aquaculture and Foreshore licences. If the customer chooses not to provide this information the application for Aquaculture and Foreshore licences cannot proceed.

14. Automated Decision Making:

Not applicable.

15. Information from Third Party:

Personal data in relation to an Aquaculture and Foreshore licence application is obtained from the applicant in line with this Department's requirement to process your application in accordance with applicable legislation. In circumstances where this Department did not gather your personal data you are still entitled to exercise your rights in relation to this personal data and the details on how to exercise individuals rights are detailed above.

16. Technical information on data collected:

Technical information on the cookies used on our Department's website is available at the following link: <u>https://www.agriculture.gov.ie/legalnotices/privacy/</u>

- personal data
- relating to automated decision making, including profiling.



An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine

Marine Engineering Division

Report on Aquaculture Licence Application

Application Reference No:	T09/093		
Report Prepared By:	Raphael Crowley		
Date:	28 October 2022		
Applicant	Marine Institute, Rinville, Oranmore, Co. Galway		
Location	Beirtreach Buí (Bertraghboy) Bay		
Applicant Type	Aquaculture/Foreshore Licence Application		
Sites Site Area (Ha) Species	T09/09321.76Finfish (cod, salmonids, wrasse and lumpsucker),		
	Shellfish (blue mussels, flat oyster, King scallop, Queen scallop), Echinoderms (sea urchins and sea cucumbers), Crustaceans (lobster) and Macroalgae (red, brown and green seaweed)		
Cultivation Method	Pens, longlines, suspended baskets		
Intertidal/Non-Intertidal	Sub-tidal		
Source of seed	Authorised licensed commercial/research sources		
Annual Production Estimates	Total maximum biomass< 100 tonnes		
Shellfish Waters Designation Reference:	Yes D No		
Environmental Designation Reference:	Yes 🗌 No 🖂		
Development Plans Reference:	Yes No Galway County Development Plan 2022-2028 Objective AF1 - Aquaculture		
Pre-Consultation Meeting	Yes No Date: Various from 2020 - 2022		

Drawing Validation Sheet

OSI Maps Comment:		D should cence iss	-	t OSI N	/lap from	n GIS	Unit for attac	hing to
BA Chart Comment:	AFMI	harts sub harts sub D should cence iss	l reques	-	-		Unit for attac	ching to
Farm Layout Drawing	Yes Direct Scale Title H Date Comm			Yes Yes Yes Yes ngs sub	⊠ ⊠ mitted a	No No No No are suit	able.	
Drawings of structures Comment:	Yes Drawi	ngs sub	No mitted a	are suita	able			
Details of Proposed Navigation Marking Comment:	Yes Drawi	⊠ ngs sub	No mitted a	are suita	ıble.			
Site Access Indicated Comment:	Yes Site ad	Ccess ma	No ap is sui	table.				
Site Co-Ordinates Indicated Comment:	Yes	\boxtimes	No					
Site Overlap Comment:	Yes		No	\boxtimes				
Oyster Fishery Order Overlap Comment:	Yes		No	\square				
		ion is su ore deei					quirements l n.	listed
	D shoul	ld be aw	are tha	at insuf	ficient	details	have been	

AFMD should be aware that insufficient details have been submitted as per above.

Site Suitability Assessment

Site Location

This existing site is located in Lehannagh Pool in Cashel Bay at the north-eastern end of Beirtreach Buí (Bertraghboy) Bay, Co. Galway. The site is in a sheltered location, protected to the west by the islands of Illaungorm North and Illaungorm South, to the south/southeast by the islands of Illaunacroghnut and Croghnut. Aquaculture has taken place at this location for a number of years without any issues indicating the hydrodynamics are suitable for this type of aquaculture. The site location maps provided are suitable for advertising. MED GIS Unit OSI Map, BA chart and co-ordinates/area were not evident in the documentation forwarded to MED for review. **AFMD should ensure OSI Map and BA chart from GIS Unit is attached to any licence issued.**

Site Management

This application is for a renewal/review of an integrated multitrophic aquaculture research site in Beirtreach Buí (Bertraghboy) Bay, Co. Galway operated by the Marine Institute. The site is used to cultivate multiple species of finfish, shellfish, echinoderms, crustaceans and seaweeds using pens, ropes and baskets for research purposes. The application indicates that maximum biomass of the site will not exceed 100 tonnes, with annual harvest output of fin-fish not to exceed 50 tonnes. The site has been in operation for a number of years and successive annual MED Finfish Inspections have observed a high standard of site management and licence compliance.

Proposed Site Layout and Structures

The original application for this site indicated two mooring grids accommodating up to 12No x 50m circumference pens that can be adapted to include up to 24 smaller pens at the site. The MI have reviewed their requirements and submitted revised drawings to DAFM in January 2022. One mooring grid for pens is required and the development will accommodate 5No x 50m circumference pens with 10m deep nets, a 6.4m x 11m works barge, a data buoy, 15No. x 60m longlines and moorings, and associated baskets and other containment structures to grow a variety of species at the site. Ancillary equipment located on the barge includes a generator and compressor. As this is a research site it is likely that a variety of equipment, methods as well as species will be trialled on this site. There should be no issue with minor changes to equipment, methods or switching between species included in the application provided these are in keeping with that submitted in the application. The site has been designed and will be operated and maintained in accordance with the DAFM Protocol for Structural Design of Marine Finfish Farms.

AFMD should ensure revised drawings submitted in January 2022 are appended to any licence issued.

Land Based Facilities / Site Access

The operator accesses the site by boat from Wallace Pier located 1.5km to the north. Details of the access route were included with the application. The land base for the site is located at Newport, Co. Mayo.

Navigation

This site has been operational for a number of years. Navigation in the area is limited to small local inshore fishing and marine leisure use. The MSO have no objections to the development. Any lights or marks will require statutory sanction from CIL.

Visual Impact

The Galway County Development Plan (CDP) 2022-2028 identifies the area of this application as within a Fully Enclosed Coast seascape. The adjoining coast is part of the Conamara Coastal Landscape Unit with a Special landscape sensitivity. The R340 and R342 regional roads are part of the Maritime Scenic Route and also form part of the Wild Atlantic Way surrounding Beirtreach Buí (Bertraghboy) Bay. The site is not visible from the nearest CDP protected views of Coonisle Quay and Glinsce (Glinsk) Pier and the views of this aquaculture site are limited from scenic routes. The types of structures in place and proposed adhere to the best practices outlined in the Guidelines for Landscape and Visual Impact Assessment of Marine Aquaculture, 2001.

Impact / Cumulative Impact

There has been licensed aquaculture activity at this location for a number of years. In addition to aquaculture, there is tourism, fishing and marine leisure in the area. The aquaculture operations at this site should not interfere with these amenities. The aquaculture site is not located within a Natura 2000 site. The application documentation includes a screening document of the potential impacts of the proposed aquaculture activity on the listed features and species of all SACs and SPAs in the environs of Beirtreach Buí (Bertraghboy) Bay which concluded there would be no significant negative impacts on the Natura sites. An EIA screening assessment by DAFM concluded that the proposal did not require an EIAR.

Marine Engineering Division has no objection to the licencing of this site.



Aquaculture & Foreshore Application Observations

Application No: T09/093 Marine Institute	Applicant Name & Area: Lehannah Pool, Beirtreah Buí Bay, Co. Galway	
	darway	
Aquaculture: Y	Category Foreshore: N	

Sea Fisheries Protection Officer Observations				
With regard to the attached APPLICATION (Review and Renewal) we note that the details as submitted remain pretty much unchanged from the initial application as circulated 23/05/2019 for which SFPA noted no observations of concern.				
It is important to note this this application is regarding a continuance as a research facility, with no commercial production or production for food use by the Marine Institute and as such SFPA continue to have little difficulty with the application progressing in its current format.				
1. Possible impacts, if any, on existing wild fisheries in the area, with an emphasis on the possible implications for the SFPA conducting official controls and possible non-compliance issues that could arise.				
None				
2. Impacts, if any, on shellfish growing areas adjacent to or within the area and the possible impact on the ability of the SFPA to conduct official controls and possible non-compliance issues that could arise.				
None				
3. Possible impacts, if any, on seafood safety.				
None				
Sea-Fisheries Protection Authority Date: 07/03/2022				



25/11/2021

Ref: Aquaculture License renewal application T09-093. Marine Institute, Lehanagh Pool, Cashel Bay, Connemara, Co Galway.

This office has no objections from a safety of navigation viewpoint to the above application however please observe the following points

- We note that the area is popular for sailing, and we expect that local and national sailing clubs and associations are aware of the nature and location of the site
- In order for charts and nautical publications to be updated the British Admiralty Hydrographic Office at Taunton,UK, is to be informed of the location and nature of the site. (Fax:0044 1823 284077), Email: sdr@ukho.gov.uk
- The applicant is required to apply to the Commissioners of Irish Lights (email: info@irishlights.ie) for sanction to establish any lights and marks that maybe required.

Yours Sincerely

Capt. Lawrence Kilbane.

Nautical Surveyor, Marine Survey Office.



Commissioners of Irish Lights Harbour Road, Dun Laoghaire Co. Dublin, Ireland

Reference: T09/093

Date: 30/03/2022

T +353.1.271.5400F +353.1.271.5566

E info@irishlights.ie
W www.irishlights.ie

The Minister Marine Finfish Unit Aquaculture and Foreshore Management Division Dept. of Agriculture Food & the Marine National Seafood Centre Clonakilty Co. Cork

Applicant: Marine Institute **Site:** Lehannah Pool, Beirtreah Buí Bay, Co. Galway

Dear Minister,

Thank you for your letter advising Irish Lights of this application, which was received on 04/03/2022.

Based on the information supplied, there appears to be no objection to the development.

It is important to ensure that no navigable inter-tidal channels are impeded by the site. If a licence is granted, all structures must be clearly marked as required by Regulations and Licensing Permit conditions and to the approval of the Nautical Surveyor with the Marine Survey Office.

Irish Lights requests that you include the following terms in the licence -

- That the applicant secures Statutory Sanction from the Commissioners of Irish Lights for the aids to navigation that may be required by the Marine Survey Office. These aids should be in place before development on the site commences. Statutory sanction forms are available at http://www.irishlights.ie/safety-navigation/statutory-sanction.aspx
- The size and specification of aids to navigation should be of the design and specification approved by the Marine Survey Office and must be agreed in advance with the Commissioners of Irish Lights.

It is recommended that local fishing and leisure interests be consulted prior to a decision being made.

Furthermore, if a licence is granted, the UK Hydrographic Office at Taunton: <u>sdr@ukho.gov.uk</u> must be informed of the development's geographical position in order to update nautical charts and other nautical publications.

Yours sincerely,

Joseph Daly Acting Navigation Services Manager

c.c. Capt. L. Kilbane, MSO, Dept. of Transport

OConnell, James

From:	Francis X O Beirn < Francis.XOBeirn@Marine.ie>	
Sent:	Friday 4 March 2022 13:13	
То:	Farr, Brendan; FinfishSC	
Cc:	Joe Silke; Jack O'Carroll; Elena Pagter (Ext); Neil Rua	
Subject:	RE: T09/093 Section 10 Notification	

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Dear Brendan,

The application under consideration was submitted by the Marine Institute. In order to avoid potential conflict of interest, the Marine Institute, will not be submitting observations on this application under Section 10 of the Aquaculture (Licence Application) Regulations, 1998 (SI No. 236 of 1998). Sincerely, Francis O'Beirn

Francis O'Beirn PhD Section Manager – Licensing and Policy Advice Marine Environment and Food Safety Services Marine Institute Rinville, Oranmore Galway, Ireland H91R673

Landline: + 353 91 387250: Mobile: +353 87 968 3094 www.marine.ie

From: Farr, Brendan [mailto:Brendan.Farr@agriculture.gov.ie]
Sent: Friday 4 March 2022 12:34
To: Joe Silke ; Francis X O Beirn ; Jack O'Carroll ; Elena Pagter (Ext)
Subject: T09/093 Section 10 Notification

Our Ref: T09/093

Applications for the Renewal & Review of an Aquaculture Licence for site T09/093 Marine Institute in Lehannah Pool, Beirtreah Buí Bay, Co. Galway

Dear Sir/Madam,

In accordance with Section 10 of the Aquaculture (Licence Application) Regulations, 1998 (SI No. 236 of 1998), you are hereby notified that this Department has received an aquaculture licence renewal and review application from the above named applicant to cultivate multi-species to include finfish, shellfish, echinoderm, crustaceans, and seaweed using cages and longlines for research purposes at a site in Lehannah Pool, Beirtreah Buí Bay, Co. Galway.

Details of the application and all other relevant documentation may be viewed on the Department's website at: https://www.gov.ie/en/collection/a62d9-aquacultureforeshore-licence-applications-galway/#bertraghboy-bay

Your Ref: T09/093

Aquaculture and Foreshore Management Division, Department of Agriculture, Food and the Marine, National Seafood Centre Clonakilty Co Cork

Date: 10/03/2022

Re: Aquaculture Licence Application - T09/093

Dear Sir/Madam,

We received notification of the referenced aquaculture licence application review/renewal on 04/03/2022. The available documentation has been reviewed. We make the following observations in relation to the proposed development.

The application refers to a development that is wholly outside designated shellfish waters. For your information, we identify in the Table the coordinates of existing primary and secondary discharges operated by Irish Water discharging within 11 km of the proposed development.

Application No.	Within 11 km of non primary discharge point	X	Y	Within 11 km of primary discharge point	X	Y
	Yes	72517	240148	Yes	72482	240466
T09_093		72567	239921	Yes	65533	250150
				Yes	65282	250136

The Department may wish to consider the proximity of wastewater discharges to the proposed aquaculture development when making a decision on this application.

Yours faithfully,

Sheila Convery

Spatial Analyst Irish Water



Uisce Éireann

Teach Colvill 24-26 Sráid Thalbóid Baile Átha Cliath 1 D01 NP86 Éire Irish Water

Colvill House 24-26 Talbot Street Dublin 1 D01 NP86 Ireland

T: +353 1 89 25000 F: +353 1 89 25001 www.water.ie

т09_093

Primary and Secondary Discharges within 11km of the proposed development (highlighted in red – approx location).





OConnell, James

From:	Housing Fem Dau <fem.dau@housing.gov.ie></fem.dau@housing.gov.ie>	
Sent:	Tuesday 12 April 2022 15:59	
То:	FinfishSC	
Subject:	T09/093 RNW - Lehannah Pool, Beirtreah Buí Bay, Co. Galway.	

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The proposed licensing of a research facility for aquaculture in Beirtreach Buí Bay, Co Galway has been evaluated by a Natura Impact Screening document. This assessment does not identify any potential significant effects on the conservation objectives of Natura sites, listed under the European Habitats and Birds Directives, from the operation of the research facility.

The Department of Housing, Local Government and Heritage concurs with this conclusion.

Regards

Michael Murphy Aonad na nlarratas ar Fhorbairt Development Applications Unit Oifigí an Rialtais Dept. of Housing, Local Government & Heritage Government Offices Bóthar an Bhaile Nua, Loch Garman, Contae Loch Garman, Y35 AP90 Newtown Road, Wexford, County Wexford, Y35 AP90

Tel: 053 9117641

OConnell, James

From:	Pauline McNulty <pauline.mcnulty@fisheriesireland.ie> on behalf of Francis O'Donnell <francis.o'donnell@fisheriesireland.ie></francis.o'donnell@fisheriesireland.ie></pauline.mcnulty@fisheriesireland.ie>
Sent:	Thursday 10 March 2022 13:57
То:	FinfishSC
Subject:	T09/093 Section 10 Notification

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To whom it may concern:

Regarding an aquaculture licence renewal and review application from the Marine Institute to cultivate multi-species to include finfish, shellfish, echinoderm, crustaceans, and seaweed using cages and longlines for research purposes at a site in Lehannah Pool, Beirtreah Buí Bay, Co. Galway, please see below the observations from Inland Fisheries Ireland.

The Lehannah Pool aquaculture site is in close proximity to the Owengowla river, a sea trout fishery in Connemara. This fishery has suffered a sea trout stock collapse in the early 1990's due to sea lice infestation and high mortality of sea trout post smolts from sea lice emanating from salmon aquaculture facilities in Bertraghboy Bay. The licencing of any finfish aquaculture facility close to the Owengowla is therefore a concern for the recovery of sea trout stocks.

IFI are aware of the research element to this application and the experiments in the use of larger salmon smolts which could potentially reduce the length of time spend at sea and therefore reduce sea lice burdens. The facility will also only hold 50 tons of salmon. In that context, IFI have no objection to this application for renewal and review of this research aquaculture licence

Regards Francis O'Donnell

Francis O' Donnell Chief Executive Officer Inland Fisheries Ireland

lascach Intíre Éireann Inland Fisheries Ireland

Tel (01)8842600 Email Francis.O'donnell@fisheriesireland.ie Web www.fisheriesireland.ie

Inland Fisheries Ireland 3044 Lake Drive Citywest Business Campus Dublin D24CK66



Marine Finfish Unit, Aquaculture and Foreshore Management Division, Department of Agriculture, Food and Marine National Seafood Centre Clonakility Co. Cork P85 TX47

28th March 2022

Applications for the Renewal & Review of an Aquaculture Licence for site T09/093 Marine Institute in Lehannah Pool, Beirtreach Buí Bay, Co. Galway

Dear Sir/Madam,

I refer to the recent documentation received in relation to aquaculture licences at Lehannah Pool, Beirtreach Buí Bay, Co. Galway, dated the 4th of March 2022. Údarás na Gaeltachta recognises and therefore has prioritised the marine resource to the creation of sustainable employment opportunities and in the creation of local and regional economic development opportunities in the Gaeltacht. Údarás na Gaeltachta objectives include the development of indigenous enterprises and the attraction of investment including FDI. Currently, of the 7,500 Údarás supported jobs in the Gaeltacht, over 900 people are employed in the aquaculture and seafood processing sectors within the Gaeltacht regions (12% of Údarás Client company employment in this sector, with a Multiplier effect of 1,777 jobs). As a key priority in the Údarás na Gaeltachta 2018-2020 strategy, the development of the marine sector has the potential to provide significant direct socio-economic benefits for the region and to generate other stimuli to further integrate the development and growth of the local economy.

Údarás na Gaeltacht considers sustainability under the three accepted headings as follows:

1. *Environment:* Aquaculture when it is managed correctly is recognised to have minimal effect on the environment, is recognised globally as having a low carbon footprint and is a vital protein source for human consumption.

2. *Economy:* aquaculture provides a practical environment for economic activity in rural coastal regions and the importance of MOWI as an key employer in this Gaeltacht region is evident.

Údarás na Gaeltachta Na Forbacha, Co. na Gaillimhe H91 TY22, Éire T: + 353 (0)91-503100 | eolas@udaras.ie www.udaras.ie



3. *Social:* Supporting the Gaeltacht community requires the provision of sustainable jobs and Údarás sees this development as a key provider of sustainable employment in this area.

Sustainable Aquaculture is core to the development of Údarás na Gaeltachta strategy and is a strategic long-term priority. Furthermore, aquaculture jobs support the traditional skills of seamanship and husbandry in these coastal communities. Through the production of marine species for either consumption or valorisation into a variety of value-added products, sustainable aquaculture offers a significant opportunity for these remote areas to maintain employment and engagement at a community level.

This site which is primarily an integrated multi-trophic aquaculture (IMTA) research site also performs a range of important studies on the testing and validation of sensors, technologies and multi-functional environmental monitoring and management systems. In addition to the rearing structures, a data-buoy on site records environmental information such as dissolved oxygen levels, water temperature, salinity, current speed and water quality which is important to sectoral development. Future plans include developing the site into an important coastal monitoring station and data collection hub, measuring a variety of environmental parameters as indicators of long-term climate change and ecosystem health.

This site is extremely important to accelerate this sector at a national level and Údarás na Gaeltachta strongly supports this application.

Le dea ghuí

Mark De Faoite Stiúrthóir Fiontraíochta, Fostaíochta & Maoine





03 May 2022

Aquaculture and Foreshore Management Division Dept. Agriculture, Food and the Marine National Seafood Centre Clonakilty Co. Cork P85 TX47

RE: T09/93 Statutory Consultation

Dear Mr. Farr,

In response to your email of Wednesday 20 April, in relation to the statutory consultation for the review/renewal of the aquaculture licence for T09/93, please find our responses overleaf.

Yours sincerely,

Neil Ruare

Neil Ruane FEAS Aquaculture Section

Foras na Mara Rinn Mhaoil Uarán Mór Co.na Gaillimhe Éire H91 R673 Marine Institute Rinville Oranmore Co Galway Ireland H91R673 Tel +353 91 387 200

Tel +353 91 387 200 Fax +353 91 387 201 Foras na Mara Tri Plás Pháirc Sráid Haiste Uachtarach Baile Átha Cliath 2 Éire D02 FX65

Three Park Place Upper Hatch Street Dublin 2 Ireland D02 FX65

Marine Institute

Tel +35317753900 Fax +35391387201 Foras na Mara Baile Uí Fhiacháin Co Mhaigh Eo Éire F28 PF65 Marine Institute Furnace Newport Co Mayo Ireland F28 PF65 Tel +353 98 42300







Údarás na Gaeltachta

No specific comments. We welcome the support acknowledged by Údarás na Gaeltachta and look forward to collaborating with them in the future should this application be successful.

Sea Fisheries Protection Authority No specific comments.

Irish Water

We thank Irish Water for identifying existing primary and secondary discharge points within 11 km of the site. We reiterate that this application refers to a research site with no commercial production nor production for human consumption.

Inland Fisheries Ireland

We would like to reiterate that regular sea lice monitoring is performed on site as outlined in the Pest Management Strategy which accompanied the application.

Dept. Housing, Local Government and Heritage

No specific comments.

Marine Survey Office

The Marine Institute has promoted awareness of the site with local community groups through social media and meetings such as the Cashel Fair Day. In addition, a sign located on Wallace pier outlines the nature and location of the site T09/93.

Should the licence be granted, the British Admiralty Hydrographic Office will be informed of the location and nature of the site.

We have been in communication with the Commissioners of Irish Lights regarding lighting and markings required and will adhere to their recommendations.

Commissioners of Irish Lights

Should the licence be granted we will ensure that all structures are clearly marked as required and approved by the Marine Survey Office.

We will seek statutory sanction for any aids to navigation which may be required as outlined in the CIL response.

We will inform the British Admiralty Hydrographic Office of the location and nature of the site.

Foras na Mara Rinn Mhaoil Uarán Mór Co.na Gaillimhe Éire H91 R673 Marine Institute Rinville Oranmore Co Galway Ireland H91 R673

Tel +353 91 387 200 Fax +353 91 387 201 Foras na Mara Trí Plás Pháirc Sráid Haiste Uachtarach Baile Átha Cliath 2 Éire D02 FX65 Marine Institute Three Park Place Upper Hatch Street Dublin 2 Ireland D02 FX65

Tel +35317753900 Fax +35391387201 Foras na Mara Baile Uí Fhiacháin Co Mhaigh Eo Éire F28 PF65 Marine Institute Furnace Newport Co Mayo Ireland F28 PF65 Tel +353 98 42300



EIA SCREENING ASSESSMENT T09/093 November 2021	
1. Applicant Details	
Name	Marine Institute
Address	Rinville,
	Oranmore,
	Co. Galway, H91 R673
2. Characteristics of Project	
	Application by the Marine Institute for the renewal and review of Aquaculture Licence number AQ176. The application is for the continued use of Site T09/093A for the cultivation of multi-species for research purposes. This project involves the cultivation of;
a) Species cultivation proposed	Finfish (cod, salmonids and cleaner fish of the wrasse family (Labridae) and lumpsucker (<i>Cyclopterus lumpus</i>)), Molluscs (bivalves including blue mussels, flat oyster, King scallop, Queen scallop), Echinoderms (including sea urchins and sea cucumbers), crustaceans (including lobster) and macroalgae (including seaweed species in the families Chlorophyta, Rhodophyta and Phaeophyta which are naturally occurring in Ireland).
b) Method	Cages and Longlines (not more than 24 structures)
c) Production in intertidal zone	No
d) Production beyond intertidal zone	Yes
e) Source of seed/spat etc	Stock will be sourced from authorised licensed commercial/research sources.
f) Is a non-native species to be cultivated?	No
g) Annual Production Estimates - Tonnes	Year 1 N/A, for research purposes only - maximum biomass < 100 tonnes of all species in total (annual harvest not to exceed 50 tonnes of finfish)
	Year 2 "
	Year 3 "
	Year 4 "
3. Location of Project	
a) File No.	T09/093
b) No. of sites	1
c) Location	Lehannah Pool, Beirtreach Buí Bay
d) Hectares	21.761 ha

e) Shellfish Waters Designation	No
If yes, identify area as per S.I. 268 of 2006/S.I. 55 of 2009	N/A
If yes, Name of designated area - Map No. & Date of Map	N/A
f) Natura 2000 site	No
If yes, identify site and type	N/A
4. Development Plan	
a) County Development Plan	Galway County Development Plan 2015-2021
	Objective AFF 8 – Aquaculture
	The Council shall support and promote the sustainable development of the aquaculture sector
	in order to maximize its contribution to employment creation and growth in coastal communities
	whilst balancing environmental considerations. Special consideration should be made to
	gradually enforce a policy that would encourage onshore fish farming practices and special
	consideration would be given when granting planning for on shore farms to areas that are already involved in the fish farming industry.
If yes, identify relevant sections	
If yes, period covered	2015–2021
	Galway County Council – The Gaeltacht Local Area Plan has been replaced with Variation
b) Local Area Plan	No.2(b) to the Galway County Development Plan 2015–2021 - Adopted 28th May 2018
If yes, identify relevant sections	N/A
c) Other	No
If yes, please specify and identify relevant sections	

T09/093		
EIA SCREENING CHECKLIST		
Is it an ANNEX II project?	Yes	
Is the project located on or adjacent to a Natura 2000 area?	Yes. * Connemara Bog Complex SPA (004181) – a large site encompassing much of the south Connemara lowlands of Co. Galway. This SPA is located approximately 6km from the licensed site under consideration. * Slyne Head to Ardmore Point Islands SPA (004159) – Inishlackan and Freaghillaun are the closest islands in the SPA to the licensed area under consideration (approximately 7km). * Inishmore Island SPA (004152) – this SPA is located approximately 27km from the licensed site under consideration. * Connemara Bog Complex SAC (002034) – this SAC is located approximately 1km from the licensed site under consideration. * Kilkieran Bay and Islands SAC (002111) – the SAC is located just north of Galway Bay and extends from Keeraun Point, south of Carraroe, westwards to Mace Head, west of Carna, all in Co. Galway. This SAC is located approximately 12km by sea from the licensed site under consideration. * Cregduff Lough SAC (001251) –this SAC is located approximately 3.5km due west from the licensed site under consideration. * Dog's Bay SAC (002324) - this SAC is located approximately 5kmwest southwest from the licensed site under consideration. * Lough Nageeron SAC (002119) - this SAC is located approximately 5km south from the licensed site under consideration. * Maumturk Mountains SAC (002008) - this SAC is located approximately 4.5km north east from the licensed site under consideration. * Murvey Machair SAC (002129) - this SAC is located approximately 7kmdue west from the licensed site under consideration.	

	 * The Twelve Bens Mountains/Garraun Complex SAC (002031) - this SAC is located approximately 4km due north from the licensed site under consideration. * Slyne Head Islands SAC (000328) – this SAC is located approximately 24km from the licensed site under consideration. * Inishmore Island SAC (000213) – this SAC is located approximately 28km by sea from the licensed site under consideration. * West Connaught Coast SAC (002998) - the southern component of this SAC is located approximately 37km by sea from the licensed site under consideration. The cumulative assessment indicates no disturbing impacts on protected species, aquaculture in the bay is at a low level (3%) and there is no spatial overlap on any protected features. 	
If yes, has the appropriate assessment been carried out?	Screening Statement (2016 BIM)	
1. CHARACTERISTICS OF THE PROJECT - ANNEX III (1)	Yes/No - Briefly describe	Is this likely to result in a significant effect? Yes/No? - Why
(a) Size of project		
Will the project be out of scale with the existing environment?	No. The site is small in scale in the context of the body of water in which it is located.	No. Low impact cages and longline floats (not more than 24 structures) will be used in accordance with best practice.
Will it lead to further consequential development or works (e.g. new roads, landing facilities, provision of new water supply)?	No. Existing infrastructure will be used, and no additional infrastructure developments are needed.	
(b) Cumulation with other development		
Are there potential cumulative impacts with existing aquaculture projects or with other licensed aquaculture projects but which have not yet begun?	 Yes. There are other aquaculture projects in the bay including: four salmon sites (inclusive of AQ176); three oyster sites. Shellfish Order – Connemara Co-Operative. 	No. The impact on the benthos will be localised and limited to the area under the cages and longlines and will be small due to the non-commercial character of the site. The overall area involvement is not

	There are potential navigational, visual and benthic impacts.	considered significant. The impact on navigation will be mitigated by appropriate navigation markings. It is not anticipated that there will be a significant impact on other sensitive receptors e.g., air, water, cultural heritage and visual amenity.
Are there potential cumulative impacts with existing foreshore projects or with foreshore projects licensed but which have not yet begun?	No.	
Should the application for this project be regarded as an integral part of a more substantial project? If so, can related projects which are subject to separate applications proceed independently?	No.	
(c) Use of natural resources		
 Will installation or operation of the project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply? land (especially undeveloped or agricultural land)? water? energy including electricity and fuels? any other resources? 	Yes. The proposed shellfish will use naturally occurring marine phytoplankton present in the seawater. The finfish will be fed on commercially formulated feed depending on the species being cultivated.	No. High levels of plankton occur naturally at the location – cultivation at this scale will not result in limiting plankton growth in abundance.
(d) Production of waste		
Will the project produce wastes during installation or operation or decommissioning?	Yes. The cultivation of shellfish will produce faeces and pseudo faeces. Grading and removal of mortalities will result in shells being discarded. Finfish will produce faeces and mortalities.	No. The amount of produced faeces and pseudo faeces will not be significant, and the impacted area will be limited to the area directly beneath the

 municipal waste (household and/or commercial)? surplus product? construction or demolition wastes? redundant machinery or equipment? any other solid wastes? liquid or solid wastes in suspension? 	The mortalities will be removed for disposal. Cages and ropes associated with the growing process may need to be replaced.	structures. The integrated multi-trophic nature of the project will mean that the impacts of the waste being produced will be mitigated by the uptake of the shellfish and seaweed of the increased nutrients in the local area. The site is well flushed and the build-up of excess organic matter on site is not considered likely. Discarding of damaged old equipment will not be permitted. There will be a requirement to implement a Benthic Impacts Monitoring Protocol. Fallowing will be undertaken in line with the Integrated Pest Management Plan for the site
(e) Pollution and nuisances		
 Will the project release pollutants or any hazardous, toxic or noxious substances to air? Emissions from: combustion of fossil fuels from stationary or mobile sources? construction activities including plant & equipment? any other sources? 	Yes. There will be emissions associated with husbandry and harvesting finfish, shellfish and seaweed from boats.	No. Emission levels will not be significant.
 Will the project cause noise and vibration or release of light? from operation of equipment e.g. engines? from blasting or piling? 	Yes. There will be noise associated with the husbandry and harvesting of the finfish, shellfish and seaweed e.g. use of boats and other machinery. Lighting, if used, will comply with navigational safety.	No. Noise levels will not be significant.
 from construction or operational traffic? from lighting or other systems? from any other sources? (f) Risk of accidents, having regard in particular to substances or technologies used Will there be any risk of accidents during installation or operation of the project which could affect human health or the environment? 	Yes. There will be a minor risk of physical injury while working on the site but no risk to human health.	No. There is a minor risk to the environment from on- site accidents.
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Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	No.	
 Will the project involve use, storage, transport, handling or production of substances or materials which could be harmful to people or the environment (flora, fauna, water supplies)? use of hazardous or toxic substances? potential changes in occurrence of disease or effect on disease carriers (e.g. insect or water borne diseases? 	No.	
(g) Will installation, operation or decommissioning of the project involve actions which will cause physical changes in the locality (topography, land use, changes in waterbodies, etc)? • dredging?	Yes. Moorings will consist of two mooring grids to accommodate a maximum of 24 structures (cages and longlines as appropriate). As the site is for research purposes it is stated that the size and configuration of the structures will be smaller than those of commercial equivalents.	No. This can be considered as minor and reversible as all structures can be removed.

 coastal structures (seawalls, piers)? offshore structures? facilities for storage of goods or materials? facilities for treatment or disposal of solid wastes or liquid effluents? new road, rail or sea traffic during construction or operation? new road, rail, air, waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? new or diverted transmission lines or pipelines? transport of personnel or materials for construction, operation or decommissioning? decommissioning or restoration works? introduction of alien species? loss of native species or genetic diversity? any other changes? 	Transport. Yes. Personnel and materials will be transported across the foreshore by boat from Wallace Quay. Site access will be along designated routes.	No. The transport operations are limited and of short distance and duration and dependent on tides.
Will the project result in social changes, for	No.	
example, in demography, traditional		
lifestyles, employment?		
2. LOCATION OF THE PROJECT -	Yes/No - Briefly describe	Is this likely to result in a significant effect?
ANNEX III (2)		Yes/No? - Why

(a) Existing land use		
Are there existing land uses on or around the location which could be affected by the project, e.g., homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, water catchments, functional floodplains, mining or quarrying?	No. Terrestrial land uses will not be affected and there is no spatial overlap with other users of the foreshore. The site is currently licensed for the cultivation of finfish, shellfish and seaweed for research purposes (not exceeding total production of 100 tonnes in total of all species).	
Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected?	No.	
Is the project located in a previously undeveloped area?	No. The site is currently licensed for the cultivation of finfish, shellfish and seaweed for research purposes (not exceeding total production of 100 tonnes in total of all species).	
(b) Relative abundance, quality and regenerative capacity of natural resources in the area		
Are there any areas on or around the location which contain important, high quality or scarce resources which could be affected by the project? • groundwater resources • surface waters • fisheries • tourism	No.	
(c) Absorption capacity of the natural environment		
Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or	Yes. * Connemara Bog Complex SPA (004181) – a large site encompassing much of the south Connemara lowlands of Co.	No. The cumulative assessment indicates no disturbing impacts on protected species, aquaculture in the bay is at a low level (3%) and there is no spatial overlap on any protected features.

other value, which could be affected by the project?	Galway. This SPA is located approximately 6km from the licensed site under consideration. * Slyne Head to Ardmore Point Islands SPA (004159) – Inishlackan and Freaghillaun are the closest islands in the SPA to the licensed area under consideration (approximately 7km). * Inishmore Island SPA (004152) – this SPA is located approximately 27km from the licensed site under consideration. * Connemara Bog Complex SAC (002034) – this SAC is located approximately 1km from the licensed site under consideration. * Kilkieran Bay and Islands SAC (002111) – the SAC is located just north of Galway Bay and extends from Keeraun Point, south of Carraroe, westwards to Mace Head, west of Carna, all in Co. Galway. This SAC is located approximately 12km by sea from the licensed site under consideration. * Slyne Head Islands SAC (000328) – this SAC is located approximately 24km from the licensed site under consideration. * Inishmore Island SAC (000213) – this SAC is located approximately 24km from the licensed site under consideration. * Inishmore Island SAC (000213) – this SAC is located approximately 28km by sea from the licensed site under consideration. * West Connaught Coast SAC (002998) - the southern component of this SAC is located approximately 37km by sea from the licensed site under consideration.	Site T09/093A is not located within a designated SPA. The desktop review of potential linkages and analysis of spatial overlap indicate with high confidence that the renewal and review of the aquaculture licence will not have any significant impact on any SCI bird species of the adjacent SPAs. Site T09/093A is not located within a designated SAC. The desktop review of potential linkages and analysis of spatial overlap indicate with high confidence that the renewal and review of the aquaculture licence will not have any impact on the protected features and species of the adjacent SACs.
(c) Absorption capacity of the natural environment cont'd		
 Are there any other areas on or around the location which are important or sensitive for reasons of their ecology? wetlands, watercourses, or other waterbodies? the coastal zone? 	No.	

mountains, forests or woodlands?nature reserves and parks?		
Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected?	No. It is regarded as extremely unlikely that any interactions with aquaculture activities at Site T09/093A will be of any significant level. <i>Salmo salar</i> – sufficiently far removed such that interactions with aquaculture activities at Site T09/093A are highly unlikely.	
Are there any inland, coastal, marine or underground waters on or around the location which could be affected?	Yes, the development is located in coastal waters which are of Good Ecological Status according to Water Framework Directive reports for West Galway.	No. The development is small in scale in the context of coastal waters in the area.
Are there any groundwater source protection zones or areas that contribute to the recharge of groundwater resources?	No.	
Are there any areas or features of high landscape or scenic value on or around the location which could be affected?	Yes. The adjacent landscape has a high landscape sensitivity rating.	No. The development is small in scale in the context of the surrounding landscape.
Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected?	Yes. Marine leisure activities occur in coastal waters adjacent to the development.	No. Navigation markings will identify the presence of the structures and public access to recreation and other activities will not be significantly impacted by the project.
Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected?	Yes. The transport route to the access pier is via a local county road.	No. Given the scale of production the amount of additional traffic generated will not be significant.
Is the project in a location where it is likely to be highly visible to many people?	Yes. The "Connemara" stage of the Wild Atlantic Way passes to the north and southeast of the site. Galway County Council has designated scenic routes 30 (local road), 67 (R342) and 70 (R340) in the vicinity of the development. The population density of the surrounding area is low.	No. The site does not have a significant visual impact as it is not directly overlooked by these scenic routes. The residual visual impact on local residents is not significant. Road users will have a fleeting duration of the view.
Are there any areas or features of historic, cultural or archaeological importance on or	No protected structures as per the County Development Plan.	

No. There is a Shellfish Order (Connemara Co-Operative) and the area is of Good Ecological Status according to Water Framework Directive reports for West Galway.		
No.		
No. The location is sheltered from significant hydrodynamic events.		
On the basis of the above, the consensus of the Screening Group is that the proposed aquaculture research project <u>does not</u> require an Environmental Impact Assessment Report		
EIA SCREENING GROUP COMPRISES OF MEMBERS FROM: THE DEPARTMENT'S MARINE ENGINEERING DIVISION. BORD IASCAIGH MHARA; DR. BRENDAN O'CONNOR, AQUAFACT INTERNATIONAL SERVICES LTD., GALWAY. REPRESENTATIVES OF THE DEPARTMENT'S AQUACULTURE AND FORESHORE MANAGEMENT DIVISION.		
	Framework Directive reports for West Galway. No. No. The location is sheltered from significant hydrodynamic events. nsus of the Screening Group is that the proposed aquatement FMEMBERS FROM: RING DIVISION. INTERNATIONAL SERVICES LTD., GALWAY.	

Ministerial Determination in relation to Environmental Impact Assessment Report (EIAR) requirements for an aquaculture licence renew and review application (AQ. 176) to change the species cultivated from cod to finfish, shellfish and seaweed for research purposes by the Marine Institute in Lehannah Pool, Beirtreah Buí Bay, Co. Galway

I, Charlie McConalogue, Minister for Agriculture, Food and the Marine in accordance with the requirement of Regulation 5(2) of the Aquaculture (Licence Application) Regulations, 1998 have considered whether this Aquaculture Licence Renew and Review application to culture finfish, shellfish and seaweed for research purposes is likely to have significant effects on the environment and would require the submission of an Environmental Impact Assessment Report (EIAR).

I have considered the proposed aquaculture activity and determined that it is not likely to have significant effects on the environment and that an EIAR is not required in relation to this application for the reasons outlined below.

REASONS AND CONSIDERATIONS

I had regard to the provisions of:

- (i) Regulation 5 of the Aquaculture (Licence Application) Regulations, 1998;
- (ii) EIA Directives (codified by Council Directive 2011/92/EU);
- (iii) The criteria specified in Annex III of Directive 2011/92/EU
- (iv) The guidance contained in the European Commission document entitled "Guidance on EIA, Screening" (2001) and the "Interpretation of definitions of project categories of annex I and II of the EIA Directive" (2015).

and also to the report and recommendations of the Department's Screening Group with particular reference to:

- the nature and scale of the proposed aquaculture activity The site is small in scale in the context of the body of water in which it is located. Low impact cages and longline floats (not more than 24 structures) will be used in accordance with best practice.
- 2) the limited magnitude and extent of the direct impacts arising from the proposed aquaculture activity.
- 3) the absence of any protected structures or recorded monuments in the area of the proposed aquaculture activity per the Galway County Development Plan No disturbing impacts on protected species, aquaculture in the bay is at a low level (3%) and there is no spatial overlap on any features that are protected under international or national or local legislation for their ecological, landscape, cultural or other value.
- the current impact on visual amenity is not significant as designated scenic routes do not overlook the site and the population density is low.
- 5) the minor risk of accidents occurring as result of the proposed aquaculture activity.
- 6) the impact on navigation will be mitigated by appropriate navigation markings.
- 7) no significant impact on recreational use of the adjoining foreshore.

DATED: 18th January 2022

T09/093

AQUACULTURE LICENCE

AQUACULTURE MARINE SHELLFISH/FINFISH SUB TIDAL

STRUCTURES- CAGES & LONGLINES

MARINE INSTITUTE RINVILLE,

ORANMORE,

CO. GALWAY

T09/093

<u>AQUACULTURE LICENCE NO. XXXX</u>

GRANTED UNDER THE FISHERIES (AMENDMENT) ACT, 1997 (NO. 23 of 1997)

The Minister for Agriculture, Food and the Marine (hereinafter referred to as the "Minister"), in exercise of the powers conferred on him by the Fisheries (Amendment) Act, 1997 (No. 23 of 1997) (hereinafter referred to as the "Act"), grants an Aquaculture Licence to:

Marine Institute,

Rinville,

Oranmore,

Co. Galway

(hereinafter referred to as the "Licensee") for the cultivation of Finfish, Molluscan Shellfish, Echinoderms, crustaceans and seaweed macroalgae on a site in Lehannah Pool, Beirtreach Buí Bay, Co. Galway as specified in Schedule 1 attached (numbered **T09/093**) and indicated by a red line on the attached map in accordance with the plans and drawing(s) in Schedule 2 attached as approved of by the Minister, subject to the Act and Regulations made under the Act and to the terms and conditions set out in the attached pages.

This Aquaculture Licence shall remain in force for a maximum period of ten (10) years commencing on **XXXX**, provided for so long as the Foreshore Licence granted on **XXXX**, under Section 3(1) of the Foreshore Act 1933 (No.12 of 1933) in respect of the same site for the purpose referred to is in force.

A person authorised under Section 15(1)

of the Ministers and Secretaries Act 1924 to authenticate the Seal of the Minister for Agriculture, Food and the Marine.

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TERMS AND CONDITIONS APPLYING TO THIS AQUACULTURE LICENCE

1. Licensed Area

- 1.1. The area specified in *Schedule 1* attached (21.761 hectares) (labelled T09/093A) and outlined in red on the map(s) in *Schedule 1*.
- 1.2. The co-ordinates for the site are based on the Irish National Grid Co-ordinate System.

2. Species, Cultivation and Method Licensed

Species to be farmed: The site is to be utilised as a multi-species site using:

- **Finfish**: such as fish of the Families Gadidae e.g. Atlantic cod Gadus morhua; Salmonidae e.g. Atlantic salmon Salmo salar; Mugilidae e.g. grey mullet Mugil cephalus; Labridae e.g. Ballan wrasse Labrus bergylta; and Cyclopteridae e.g. lumpfish Cyclopterus lumpus,
- **Molluscan shellfish** of the Class Bivalvia such as e.g. blue mussel Mytilus edulis, King scallop Pecten maximus, Variegated scallop Chlamys varia, European flat oyster Ostrea edulis;
- Echinoderm animals such as e.g. Purple sea urchin Paracentrotus lividus, Black sea cucumber Holothuria forskali;
- Crustaceans such as e.g. European lobster Homarus gammarus;
- Seaweed macro-algae species in the Phylum Chlorophyta (green algae), Rhodophyta (red algae) and Phaeophyta (brown algae).

All species to be used on site are naturally occurring in Ireland.

- 2.1. Method: Cages and longlines.
- 2.2. The introduction of seed and fish to the site shall comply with the legislation relating to fish health.

3. Infrastructure and Site Management

Indemnity

- 3.1. The Licensee shall indemnify and keep indemnified the State, the Minister, his officers, servants or agents against all actions, loss, damage, costs, expenses and any demands or claims however arising in connection with the construction, maintenance or use of any structures, apparatus, equipment or any other thing used in connection with the licensed operation in the licensed area or in the exercise of the rights granted under the licence and the Licensee shall take such steps as the Minister may specify in order to ensure compliance with this condition.
- 3.2. The duty of maintenance and responsibility for the upkeep and safety of the site rests with the Licensee.

Design, Arrangement and Maintenance of Structures

- 3.3. The Licensee shall ensure that the equipment (including nets, cages, all flotation, mooring and anchoring devices) is placed within the licensed area only. Storage or placement of equipment or stock on the foreshore or seashore outside the licensed area is not permitted under any circumstances.
- 3.4. The Licensee shall confirm to the Department of Agriculture, Food and the Marine (hereinafter referred to as "the Department"), by way of written confirmation by a Chartered Engineer that the marine finfish farm to be used in the licensed site has been designed with skill, care, diligence and professional conduct reasonably to be expected from a designer with the qualifications and experience suitable for the design work involved. Any proposed material change to the equipment to be used during the licensing period will require written confirmation by a Chartered Engineer that the proposed change to equipment to be used in the licensed site has been designed in the same manner as aforementioned. The Licensee shall retain detailed records for inspection to confirm that this condition is being complied with.
- 3.5. The Minister may direct as to the deployment of apparatus, including number or orientation of longlines and flotation devices and their colour, within the site.
- 3.6. The Licensee shall obtain the prior approval of the Minister to any proposed material change to the plan/drawings or equipment as approved being used during the licensing period as specified in *Schedule 2* attached.
- 3.7. The Licensee shall at all times for the duration of the licence keep all equipment used for the purposes of the licensed operations in a good and proper state of repair and condition to the satisfaction of the Minister or other competent State authority.
- 3.8. The Licensee shall ensure that the ends of each longline in the licensed area legibly bear the Aquaculture Licence Number in an indelible weatherproof format.
- 3.9. The Licensee shall ensure that each cage/pen and all flotation and mooring devices in the licensed area legibly bear the Aquaculture Licence Number in an indelible weatherproof format.

Operational Conduct

- 3.10. The Licensee shall conduct its operations in a safe manner and with regard for other persons in the area and the environment and shall ensure that the operations are not injurious to adjacent lands or the public interest (including the environment) and do not interfere with navigation or other lawful activity in the vicinity of the licensed area, and shall comply with any lawful directions issued by the Minister and any other competent State authority in that regard.
- 3.11. The Licensee shall ensure that any aquaculture or other activity conducted under this licence does not adversely affect the integrity of the Natura 2000 network (if applicable) through the deterioration of natural habitats and the habitats of species and/or through disturbance of the species for which the area has been designated in so

far as such a disturbance may be significant in relation to the stated conservation objectives of the site concerned.

Waste Management

3.12. The Licensee shall ensure that the licensed and adjoining areas shall be kept clear of all redundant structures (including apparatus, equipment and/or uncontained stock), waste products and operational litter or debris and shall make provision for the prompt removal and proper disposal of such material. If the Licensee refuses or fails to do so, the Minister may cause the said structures, apparatus, equipment or other thing to be removed and the licensed area restored and shall be entitled to recover from the Licensee as a simple contract debt in any court of competent jurisdiction all costs and expenses incurred by him in connection with the removal and restoration.

Inspection

- 3.13. The licensed area and any equipment, structure, thing, or premises wherever situated used in connection with operations carried out in the licensed area shall be open for inspection at any time by an authorised person (within the meaning of section 292 of the Fisheries (Consolidation) Act 1959) (No. 14 of 1959) (as amended by the Fisheries Act 1980) (No. 1 of 1980), a Sea Fisheries Protection Officer (within the meaning of the Sea Fisheries and Maritime Jurisdiction Act 2006) (No. 8 of 2006) or any other person appointed in that regard by the Minister or other competent State authority.
- 3.14. The Licensee shall give all reasonable assistance to an authorised officer or a Sea Fisheries Protection Officer or any person duly appointed by any competent State authority to enable the person or officer enter, inspect, examine, measure and test the licensed area and any equipment, structure, thing or premises used in connection with the operations carried out in the licensed area and to take whatever samples may be deemed appropriate by that person or officer.
- 3.15. The Licensee shall keep and maintain in the State for inspection on demand by the Minister or a competent State authority, at all times, records of all operations including compliance monitoring and any required follow up action. These records shall be produced by the Licensee on demand by the Minister or other competent State authority and in any event not later than 24 hours from the making of that demand.
- 3.16. The Licensee shall furnish to the Minister or other competent State authority in the form and at the intervals determined by the Minister or other competent State authority, such information relating to the licensed area as may be required to determine compliance by the Licensee with the terms of this licence and applicable legislation.

4. <u>Containment of Stock</u>

4.1. The Licensee shall take all steps necessary to prevent the escape of fish from its cages/pens and shall notify the Department of Agriculture, Food and the Marine, Clogheen, Clonakilty, Co. Cork, the Department's Regional Engineering Division, the

Marine Institute (Salmon Management Services Division), Oranmore, Co. Galway, and Inland Fisheries Ireland within twenty four hours of any escapes of fish from the licensed area and shall keep records of the fish escaped, including numbers, types, origin and year classes and shall make these records available to the Department, the Marine Institute and Inland Fisheries Ireland.

4.2. The Licensee shall comply with the most up to date guidelines on fish containment developed by the North Atlantic Salmon Farming Industry and the North Atlantic Salmon Conservation Organisation (NASCO) Liaison Group. These guidelines can be viewed on the web link: <u>http://www.nasco.int/aquaculture.html</u> - see Annex 3 to the Williamsburg resolution (CNL (06)48 of 2003). The reference is as follows: *Guidelines on Containment of Farm Salmon, CNL (01)5.*

5. <u>Navigation and Safety</u>

- 5.1. The Licensee shall ensure that statutory sanction from the Commissioners of Irish Lights is in place prior to the commencement of operations, regarding all aids to navigation.
- 5.2. The Licensee shall ensure that the site is marked in accordance with the requirements of both the Marine Survey Office and the Commissioners of Irish Lights as specified in *Schedule 3*.
- 5.3. The Licensee shall comply with any specification requirement relating to navigational aids, flotation and mooring devices, supporting/marking posts/poles, as required by the Minister or any other competent State authority.
- 5.4. Prior to commencement of operation the Licensee shall inform the UK Hydrographic Office at Taunton, of the location and nature of the site in order that charts and nautical publications can be updated. Tel: 00 44 1823337900 Fax: 00 44 1823 284077 Email <u>sdr@ukho.gov.uk</u> and the Licensee shall submit proof to the Department within 14 days of the date of this licence that the UK Hydrographic Office has been so informed.

6. <u>Environmental Monitoring / Requirements</u>

- 6.1. The Licensee shall undertake and/or partake in monitoring, in particular environmental monitoring, as directed by the Minister or other competent State authority.
- 6.2. The Licensee shall undertake Benthic Monitoring of the licensed area in accordance with the most up to date detailed specifications of <u>Monitoring Protocol No. 1 for</u> <u>Offshore Finfish Farms Benthic Monitoring</u>, as may be revised from time to time, and promptly prepare and implement a Benthic Amelioration Plan if permitted parameters are breached (this protocol is available for viewing on the Department's website).
- 6.3. The Licensee shall undertake Water Column Monitoring of the licensed area in accordance with the most up to date detailed specifications of <u>Monitoring Protocol No.</u> 2 for Offshore Finfish Farms Water Column Monitoring, as may be revised from

time to time, and promptly take any required follow-up action in the light of the results of that monitoring (this protocol is available for viewing on the Department's website).

Requirements

- 6.4. The Licensee shall take all necessary action to ensure the minimisation of azoic conditions and ammoniacal nitrogen levels under and adjacent to cages/pens.
- 6.5. The Licensee shall ensure the fallowing of each licensed area for at least 30 continuous days before restocking with fish of a different generation, in accordance with the most up to date requirements of the <u>Protocol for Fallowing at Offshore Finfish Farms</u>, as may be revised from time to time (this protocol is available for viewing on the Department's website).

Discharges to Sea

6.6. The Licensee (or its agent) is prohibited from discharging into the sea or other waters untreated blood or other matter from harvesting, or of contaminated effluent from washing of nets or equipment, from the licensed area.

7. Fish Health / Mortality Management / Sea-Lice Monitoring/ Movement of Fish

Fish Health Regulations

7.1. Before the site is stocked the Licensee shall ensure that a Fish Health Authorisation under statutory provisions giving effect to Council Directive No. 2006/88/EC, as amended, or any other legislative act that replaces that Directive on animal health requirements for aquaculture animals and their products, and on the prevention and control of certain diseases in aquatic animals, is in place.

Disposal of Mortalities

7.2. The Licensee shall dispose of dead fish in accordance with the applicable statutory provisions and requirements.

Sea-Lice Monitoring Protocol

7.3. The Licensee shall comply with the most up to date detailed specifications of Monitoring Protocol No. 3 for Offshore Finfish Farms – Sea Lice Monitoring and Control, as may be revised from time to time, for sea lice monitoring and control in the licensed area (this protocol is available for viewing on the Department's website).

Movement of Fish

7.4. The Licensee shall comply with any regulations in force governing the movement of fish.

8. <u>Animal Remedies and Dangerous Substances</u>

Authorised Remedies

8.1. The Licensee shall only use those animal remedies approved by the Department or other competent State authority for the purpose of maintaining the health of the fish stocked. The Licensee shall only use those chemicals and animal remedies in the licensed area in accordance with instructions issued by the Minister, the Marine

Institute or other competent State authority from time to time and in accordance with the prescribing instructions set by the veterinarian.

Authorised Substances

- 8.2. The Licensee shall not use a "Priority Hazardous Substance" as may be defined from time to time in legislation concerning water quality.
- 8.3. The Licensee shall not use any substance or thing or do anything, which has a deleterious effect on the environment of the licensed area including the use of organotin based anti-foulants and shall make adequate arrangements for the hygienic and disease free operation of the licensed area and shall comply with any directions issued by the Minister, the Marine Institute or other competent State authority from time to time in that regard.

Records of Use and Withdrawal Periods

- 8.4. The Licensee shall keep full records, at the place of business, of all chemicals and animal remedies with which the fish have been treated, including quantities and times of use. All chemical and animal remedies used in the licensed area shall be used in accordance with instructions issued by the Minister, the Marine Institute or other competent State authority from time to time.
- 8.5. The Licensee shall maintain the following:-
 - 8.5.1. Records of a receipt of a dangerous substance.
 - 8.5.2. Each prescription issued in respect of an animal remedy which consists of or contains a dangerous substance.
 - 8.5.3. Records of storage of a dangerous substance,
 - 8.5.4. Records of use of a dangerous substance, and
 - 8.5.5. Such other record as the Minister may specify.

Storage Requirements

8.6. The Licensee shall ensure that all dangerous substances within the meaning of List II of Annex I to Directive 2006/11/EC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community are stored in a manner so as to prevent any discharge, accidental or otherwise.

9. <u>Emergency Plans</u>

9.1 The Licensee shall regularly maintain and update its Comprehensive Emergency Plan, providing in particular for an appropriate response to, unexplained mortalities significantly above the level of what is considered to be normal for the farm area in question under prevailing conditions, fish escapes, fish disease, chemical spills and other significant matters arising in the course of its aquaculture operations. Additionally, the plan shall provide for proper site clearance in due course (i.e., before expiry of this Licence) and for restoration of the site in the event of any storm damage to or disturbance of the cages/pens (or moorings and ancillary equipment) in the meantime.

10. Duration, Cessation, Review, Revocation, Amendment, Assignment

Duration, Cessation

10.1. This Licence shall remain in force until, and as long as the accompanying Foreshore Licence remains in force.

Review

10.2. The Licensee may apply for a review of the licence at any time after the expiration of three years since the granting of the licence or its last renewal in accordance with section 70 of the Act.

Revocation, Amendment

- 10.3. Subject to the Act, the Minister may revoke or amend the licence if:-
 - 10.3.1 he considers that it is in the public interest to do so,
 - 10.3.2 he is satisfied that there has been a breach of any condition specified in the licence e.g., operating outside the licensed area,
 - 10.3.3 the licensed area to which the licence relates is not being properly maintained,
 - 10.3.4 water quality results, benthic impact or general performance in the licensed area do not meet the standards set by the Minister or the competent State authority.

Assignment

- 10.4. This Licence shall not be assigned without the prior written consent of the Minister and may not be assigned during the period of three years, dating from the commencement or renewal of this licence, unless the Minister determines that it may be assigned under condition 10(5) or the condition set out in 10(6) applies.
- 10.5. A Licensee, who considers that there are exceptional reasons for the assignment of the Licence during the first three years, may apply to the Minister, giving those reasons, for a determination that the Licence may be assigned. The Minister may, at his discretion, having considered the reasons given by the Licensee, determine whether or not the Licence may be assigned. The determination of the Minister in this regard is final.
- 10.6. Where the Licensee is a company (within the meaning of the Companies Acts) and goes into Liquidation (within the meaning of the Companies Acts) in the first three years dating from the commencement of the licence, the Liquidator shall, with the consent of the Minister, be entitled to assign the licence to enable him to discharge any debts of the liquidated company.

10.7. This licence is issued subject to any order that the High Court may make under section 218 of the Companies Act 1963 or otherwise with regard to the assignment of this licence.

11. <u>Fees</u>

- 11.1. The Licensee shall pay to the Minister an annual aquaculture licence fee in accordance with the Aquaculture (Licence Application and Licence Fees) Regulations 1998 (S.I. No. 270/1998) as amended by the Aquaculture (Licence Fees) Regulations 2000 (S.I. No. 282 of 2000) or an amount payable under Regulations made under section 64 of the Act.
- 11.2. The Minister may revoke the licence where the Licensee fails to pay the aquaculture licence fees on demand.

12. <u>General Terms and Conditions</u>

- 12.1. The Licensee shall at all times comply with all laws applicable to aquaculture operations.
- 12.2. Any reference to a statute or an act of an institution of the European Union (whether specifically named or not) includes any amendments or re-enactments in force and all statutory instruments, orders, notices, regulations, directions, bye-laws, certificates, permissions and plans made, issued or given effect under such legislation shall remain valid.
- 12.3. If any condition or part of a condition in this licence is held to be illegal or unenforceable in whole or in part, such condition shall be deemed not to form part of this licence but the enforceability of the remainder of this licence is not affected.
- 12.4. The Licensee shall at all times hold all necessary licences, consents, permissions, permits or authorisations associated with any activities of the Licensee in connection with the licensed area.
- 12.5.The Licensee shall co-operate in the audit from time to time of its aquaculture operations and licensed area and facilities and premises in accordance with the most up to date detailed specifications of <u>Monitoring Protocol No. 4 for Offshore Finfish</u> <u>Farms Audit of Operations</u>, as may be revised from time to time (this protocol is available for viewing on the Department's website).

Notification

12.6. Without prejudice to any other remedy under the licence or in law, if the Minister is of the view that the Licensee is in breach of any obligation under this licence, the Minister may, by notice in writing, require that the Licensee rectifies such breach, within such time as is specified by the Minister. The Licensee shall comply with any direction of the Minister within the time specified in the notice.

- 12.7. Any notice to be given by the Minister may be transmitted through the Post Office addressed to the Licensee at the last known address of the Licensee.
- 12.8. The Licensee shall notify the Minister within 7 days of any change in the Licensee's address, telephone, e-mail or facsimile number.

Tax Clearance Certificate

12.9. During the term of this licence the Licensee shall provide to the Minister on demand a current tax clearance certificate.

Companies and Co-operatives

- 12.10. In the event of the licence being granted to a company (within the meaning of the Companies Acts), control of the licensee company shall not change in any respect from the control of the company as existed on the date that the licence was granted so long as this licence shall remain in force save with the prior written permission of the Minister.
- 12.11. In the event of a licence being granted to a company that has been incorporated outside this State, the licensee company shall register with the Companies Registration Office within one month of the establishment of a place of business in the State or alternatively, within one month of the establishment of a branch of the said company in the State and the licensee company shall submit proof to the Department within 14 days of the end of that month that it has been so registered.
- 12.12. Where the licensee is a Company within the meaning of the Companies Acts, the licensee company shall ensure that it does not become dissolved within the meaning of the Companies Acts for so long as this licence shall remain in force.
- 12.13. In the event of the licence being granted to a society (within the meaning of section 2 of the Industrial and Provident Societies (Amendment) Act 1978 (No.23 of 1978)) the following conditions shall apply:-
 - 12.13.1. The rules relating to membership of the society shall enable any resident of the State to become a member of it where the resident fulfils all the conditions laid down by the society for membership of it and the rules shall not lay down different conditions for different classes of people;
 - 12.13.2. The rules relating to the society as submitted to the Minister before the grant of this licence shall not be amended subsequently other than with the written permission of the Minister; and
 - 12.13.3. The Minister may, if he considers it necessary in the interests of good management of the licensed area, direct that an amendment may be made to the rules of the society and the Licensee shall amend the rules in accordance with that direction.

Clearance of Site

12.14. The Licensee shall, at the Licensee's own expense, if so required by written notice from the Minister and within three weeks after receipt of such notice or on cessation of the licence for any other cause, remove the structures, apparatus, equipment or any other thing to the satisfaction of the Minister. If the Licensee refuses or fails to do so, the Minister may cause the said structures, apparatus, equipment or other thing to be removed and the licensed area restored and shall be entitled to recover from the Licensee as a simple contract debt in any court of competent jurisdiction all costs and expenses incurred by him in connection with the removal and restoration. The Licensee shall take such steps as the Minister may specify in order to secure compliance with this condition.

Additional Conditions

12.15. Additional Conditions in Schedule 4 and Schedule 5.

SCHEDULE 1

Schedule 1 contains:

•the co-ordinates of the site based on the Irish National Grid Co-ordinate System and the area of the site

Site T09/093A (21.761 Ha)

The area seaward of the high water mark and enclosed by a line drawn from Irish National Grid Reference point

078664,	240493	to Irish National Grid Reference point
079061,	240707	to Irish National Grid Reference point
079320,	240266	to Irish National Grid Reference point
079054,	240119	to Irish National Grid Reference point
078820.	240220	to the first mentioned point.

•site map



•a chart showing the location of the site in relation to the surrounding area.



Schedule 2 contains:

•the approved plans and drawing(s)



Schedule 3 contains:

•requirements of the MSO and/or CIL

the applicant has secured Statutory Sanction from the Commissioners of Irish Lights for the aids to navigation that cover site T09/93 as required.

Schedule 4 contains:

Stocking and equipment deployment conditions

The cultivation of fin-fish (cod, salmonids, cleaner fish of the wrasse family (Labridae) and lumpsucker (*Cyclopterus lumpus*)), shellfish (blue mussels (*Mytilus edulis*), other bivalves, sea urchins and crustaceans), and seaweed (marine macroalgae of the genera *Alaria*, *Laminari*a), will not exceed a total production of 100 tonnes.

Annual harvest output not to exceed 50 tonnes of fin fish.

Floating Facilities

Moorings will consist of 2No mooring grids to accommodate 24No structures of up to 12No fin fish cages and not more than 6 long lines for shellfish and seaweed cultivation with small circa 2m³ sentinel cages and passive sampling structures up to a maximum of 12 structures. All associated mooring and anchors are to be located within the boundaries of the licensed site area.

Additional conditions applicable to the licence.

The licensee shall provide that:

- 1. All wastes brought ashore are dealt with by the applicant in an environmentally friendly manner.
- 2. The licensee manages the operation in such a manner as to avoid littering the Marine environment.
- 3. The disposal of all dead shellfish and finfish shall be in a manner acceptable to Galway County Council.
- 4. The management of all detritus should minimise the effect on local ecology.



Drawn : 10-03-2023

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