

Marine Licence Application for Scientific Instrument Deployments

Version 1.0

Marine (Scotland) Act 2010 Marine and Coastal Access Act 2009

Acronyms

Please note the following acronyms referred to in this application form:

ADCP	Acoustic Doppler Current Profiler
MHWS	Mean High Water Springs
MPA	Marine Protected Area
MS-LOT	Marine Scotland – Licensing Operations Team
ROV	Remotely Operated Vehicle
SAC	Special Area of Conservation
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
WGS84	World Geodetic System 1984

Explanatory Notes

The following numbered paragraphs correspond to the questions on the application form and are intended to assist in completing the form. These explanatory notes are specific to this application and so you are advised to read these in conjunction with the Marine Scotland Guidance for Marine Licence Applicants document.

1. Applicant Details

The person making the application who will be named as the licensee.

2. Agent Details

Any person acting under contract (or other agreement) on behalf of any party listed as the applicant and having responsibility for the control, management or physical deposit or removal of any substance(s) or object(s).

3. Payment

Indicate payment method. Cheques must be made payable to: The Scottish Government.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

4. Application Type

Indicate if the application is for a new scientific instrument deployment site or an existing scientific instrument deployment site. Provide the existing or previous consent/licence number or any other reference details and the expiry date if applicable.

5. Project Details

- (a) Give a brief description of the project e.g. wave rider buoy deployment.
- (b) Provide the proposed start date of the project. The start date will not be backdated, since to commence a project for which a licence has not been obtained will constitute an offence, which may result in appropriate legal action. A licence is normally valid for the duration of the project but not exceeding 6 years. If a project will not be completed before a marine licence lapses, it will be necessary for licence holders to re-apply for a further licence to continue any ongoing work at least 14 weeks prior to the expiry date of the licence. **Target duration for determination of a marine licence application is 14 weeks.**
- (c) Provide the proposed completion date of the project.
- (d) Provide the cost of the works seawards of the tidal limit of MHWS. This estimate should only cover work taking place below the tidal level of MHWS and must take into consideration the cost of materials, labour fees etc.

- (e) Describe the location of the proposed works. Include a list of the latitude and longitude co-ordinates (WGS84) for each instrument location. WGS84 is the World Geodetic System 1984 and the reference co-ordinate system used for marine licence applications. Co-ordinates taken from GPS equipment should be set to WGS84. Coordinates taken from recent admiralty charts will be on a WGS84 compatible datum. Ordnance survey maps do not use WGS84.

Example: For positions read from charts the format should be as in the example: 55°55.555'N 002°22.222'W (WGS84). The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the format should be as in the example: 55°55'44"N 2°22'11"W (WGS84).

It is important that the correct positions, in the correct format, are included with this application, as any errors will result in the application being refused or delayed.

To supplement your application, please provide a suitably scaled extract of an Ordnance Survey Map (1:2,500 scale but not more than 1:10,000) or Admiralty Chart which must be marked to indicate:

- the full extent of the works in relation to the surrounding area;
- latitude and longitude co-ordinates defining the location of the works;
- the level of MHWS;
- any adjacent SAC, SPA, SSSI, MPA, Ramsar or similar conservation area boundary.

Drawings and plans will be consulted upon. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

- (f) Indicate if the project is located within the jurisdiction of a statutory harbour authority and provide details of the statutory harbour authority where relevant.
- (g) Provide a full method statement, including schedule of work, the period of time it will be in place, its purpose and expected position (e.g. sea bed or water column).
- (h) Provide assessment of the potential impacts the works may have, including interference with other uses of the sea. Please include details of areas of concern e.g. designated conservation areas, such as a SAC, SPA, SSSI, MPA or Ramsar site and shellfish harvesting areas. Further guidance on designated conservation areas can be obtained from SNH at this website: <http://gateway.snh.gov.uk/sitelink/index.jsp> and guidance on shellfish harvesting areas can be obtained from <http://www.foodstandards.gov.scot/> with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

Applicants should also be aware of the need to pay due regard to coastal and marine archaeological matters and attention is drawn to Historic Scotland's Operational Policy Paper HP6, "Conserving the Underwater Heritage".

Where there are potential impacts from the works, please provide details of proposed mitigation in response to potential impacts.

6. Deposits

- (a) Indicate all instruments to be deployed, providing further information about the quantity and further details about the instrument to be deployed. Please include the details below depending on type of instrument:

Deployment of buoys (e.g. scientific buoy, marker buoy, associated guard buoy)

- Description
- Type
- Size

Towed equipment (e.g profiling instruments):

- Description including number of cables
- Type
- Size including length, width and depth of towed equipment (metres)

Deposits on the sea bed:

- Description including how long proposed to be deposited
- Type
- Size including full dimensions (metres)

Where the project involves a number of elements, please complete all appropriate sections.

- (b) Provide the vessel name, vessel type and name and address of all vessel operators to be used for scientific instrument deployment. If vessel details are not available at the time of application, please indicate this on the form as these details will be required prior to licence issue. Continue on a separate sheet if necessary.
- (c) Provide details of the vessel role (e.g guard or fisheries liaison), indicate if the vessel(s) will be stationary during any survey work and provide details of the length of time that the vessel(s) will be stationary.

7. Noise Monitoring

Under the Marine Strategy Regulations (2010), there is now a requirement to monitor loud, low to mid frequency (10Hz to 10kHz) impulsive noise. Activities where this type of noise is produced include seismic airguns, other geophysical surveys (<10kHz), pile driving, explosives and certain acoustic deterrent devices. Where noisy activity is being undertaken, you must complete an initial registration form for the noise registry which allows you to provide details on the proposed work. Completion of a 'close-out' form, which allows licensees to provide details of the actual dates and locations where the activities occurred, is also required within 12 weeks of the completion of the 'noisy' activity or, in the case of prolonged activities such as piling for harbour construction or wind farms, at quarterly intervals or after each phase of foundation installation.

These forms can be downloaded from:

<http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

Marine licence applications will not be accepted until this form has been completed and submitted.

8. Scotland's National Marine Plan

Scotland's National Marine Plan has been prepared in accordance with the EU Directive 2014/89/EU, which came into force in July 2014. The Directive introduces a framework for maritime spatial planning and aims to promote the sustainable development of marine areas and the sustainable use of marine resources. It also sets out a number of minimum requirements all of which have been addressed in this plan. In doing so, and in accordance with article 5(3) of the Directive, Marine Scotland have considered a wide range of sectoral uses and activities and have determined how these different objectives are reflected and weighted in the marine plan. Land-sea interactions have also been taken into account as part of the marine planning process. Any applicant for a marine licence should consider their proposals with reference to Scotland's National Marine Plan. A copy of Scotland's National Marine Plan can be found at: <http://www.gov.scot/Publications/2015/03/6517/0>

Indicate whether you have considered the project with reference to Scotland's National Marine Plan and provide details of considerations made including reference to the policies that have been considered. If you have not considered the project with reference to Scotland's National Marine Plan please provide an explanation.

9. Consultation

Provide details of all bodies consulted and give details of any consents issued including date of issue.

10. Associated Works

Indicate whether the application is associated with any other marine projects (e.g. land reclamation, marine/harbour construction works, dredging and sea disposal etc). If this is the case, provide reference/licence number for the related marine projects

Marine Licence Application for Scientific Instrument Deployments

Version 1.0

Marine (Scotland) Act 2010 Marine and Coastal Access Act 2009

It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.

Under Section 54 of the Marine (Scotland) Act 2010 and Section 101 of the Marine and Coastal Access Act 2009, all information contained within and provided in support of this application will be placed on a Public Register. There are no national security grounds for application information not going on the Register under the 2010 Act. Under the 2009 Act, application information goes on the Register unless the Secretary of State determines that its disclosure in the Register would be contrary to the interests of national security.

Public Register

Do you consider that any of the information contained within or provided in support of this application should not be disclosed:

(a) for reasons of national security; YES NO

(b) for reasons of confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate commercial interest? YES NO

If **YES**, to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.

WARNING

It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Target duration for determination is 14 weeks. Please note that missing or erroneous information in your application and complications resulting from consultation may result in the application being refused or delayed.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

Declaration

I declare to the best of my knowledge and belief that the information given in this form and related papers is true.

Signature

[Redacted]

Date

01/05/19

Name in BLOCK LETTERS

PETER MACDOUGALL

Application Check List

Please check that you provide all relevant information in support of your application, including but not limited to the following:

- Completed and signed application form
- Maps/Charts
- Co-ordinates of the boundary points of the area of harbour jurisdiction (if you are a statutory harbour authority)
- Method Statement
- Additional information e.g. photographs, consultation correspondence (if applicable)
- Noise Registry – Initial Registration Form (if applicable)
- Payment (if paying by cheque)

1. Applicant Details

Title: **Mr** Initials: **PM** Surname: **MacDougall**

Trading Title (if appropriate):

Address: Dawnfresh Farming, Bothwell Park Industrial Estate, Uddingston, Lanarkshire, G71 6LS

Name of contact (if different):

Telephone No. (inc. dialing code): **[Redacted]**

Email: **Peter.MacDougall@dawnfresh.co.uk**

Statutory Harbour Authority? YES NO

If **YES**, please provide a list of the latitude and longitude co-ordinates (WGS84) of the boundary points of the area of harbour jurisdiction using Appendix 01 Additional Co-ordinates form if necessary.

2. Agent Details (if any)

Title: **Mr** Initials: **DA** Surname: **Anderson**

Trading Title (if appropriate):

Address: Anderson Marine Surveys Limited, Bank House, Shore Road, Tighnabruaich, PA21 2BB

Name of contact (if different):

Telephone No. (inc. dialing code): **+44 (0) 1700 811677**

Email: **ams11@outlook.com**

3. Payment

Enclosed Cheque Invoice

Contact and address to send invoice to:

Applicant Agent Other

If **OTHER**, please provide contact details:

Title: Initials: Surname:

Address:

Email:

4. Application Type

Is this application for a new scientific instrument deployment site or an existing scientific instrument deployment site:

New Site Existing Site

If an **EXISTING SITE**, please provide the consent/licence number or any other reference details and the expiry date if applicable and expiry date:

Consent/Licence Number or Other Reference Details	Expiry Date

5. Project Details

(a) Brief description of the project (e.g. wave rider buoy deployment):

A tracer dye survey to support the validation of dispersion coefficients in a Delft 3D model being developed to evaluate the fate and behavior of chemical discharges from 3 proposed aquaculture sites in the Firth of Clyde in support of permit applications to SEPA. 10 litres of Rhodamine WT (a water tracer widely used in the industry) will be released in one location and monitored in a "dye patch" experiment to provide data to validate the dispersion in the model to SEPA requirements. Dye releases will be conducted at two different tide states both releases will be of 10 litres of Rhodamine

(b) Proposed start date (**Target duration for determination of a marine licence application is 14 weeks**):

(c) Proposed completion date:

(d) Cost of the works seawards of the tidal limit of MHWS:

(e) Location:

Latitude and Longitude co-ordinates (WGS84) defining the extent of the project (continue on Appendix 01 Additional Co-ordinates form if necessary):

Latitude										Longitude										
5	5	°	4	4	.	1	0	0	' N	0	0	4	°	5	7	.	0	0	0	' W
		°			.				' N				°			.				' W
		°			.				' N				°			.				' W
		°			.				' N				°			.				' W
		°			.				' N				°			.				' W
		°			.				' N				°			.				' W
		°			.				' N				°			.				' W
		°			.				' N				°			.				' W
		°			.				' N				°			.				' W
		°			.				' N				°			.				' W

(f) Is the project located within the jurisdiction of a statutory harbour authority?

YES NO

If **YES**, please specify statutory harbour authority:

Clydeport

(g) Method statement including schedule of work (continue on separate sheet if necessary):

10L of Rhodamine WT will be released from a vessel and observed for a maximum of 4 or 5 hours, depending on the environmental conditions. The purpose of this survey is to determine the environmental impacts from aquaculture - a major industry in Scotland - and is aligned with the National Marine Plan. The 10 litre quantity is necessary as the dispersive conditions at this highly energetic location would cause a lower quantity to become untraceable to quickly to support the validation of the model. The large volume of receiving water, currents and rapid degradation of Rhodamine WT in a saline environment will dissipate the chemical.

The survey will be conducted twice to account for the tidal cycle - once at mid-ebb and once at mid-flood and will result in 2 x releases of 10 litre quantities of Rhodamine WT.

A Sentinel Workhorse ADCP will be deployed for the duration of the survey, this will be deployed directly on the seabed at the dye release location and placed in an inline frame with ground line and riser. The ADCP will be recovered on completion of the survey along with all associated ropes and mooring weight the riser will be surface marked with a 0.5m high-visibility buoy.

(h) Potential impacts the works may have (including details of areas of concern e.g designated conservation and shellfish harvesting areas) and proposed mitigation in response to potential impacts (continue on separate sheet if necessary):

Refer to figures supplied with the application form for receptors of potential impacts. All potential environmental receptors are a sufficient distance away from the release site so that no significant environmental impacts are expected to occur.

6. Deposits

(a) Please indicate the instruments to be deployed:

Instruments	Instrument Details (e.g description, type and size)	Quantity
Scientific Buoys (e.g waveriders or wave-powered)	NA	NA
Marker Buoys	NA	NA
Associated Guard Buoys	NA	NA
Profiling Instruments (e.g ADCP)	Sentinel Workhorse ADCP	1
ROV	NA	NANA
Other (please specify)	Fluorometer will be deployed over the side of the vessel conducting the survey, but will remain attached to the vessel	1

(b) Details of any vessel(s) undertaking deposit or removal activities (please note that a marine licence cannot be issued until the vessel details have been confirmed. Continue on a separate sheet if necessary):

Vessel	Vessel Name	Type of Vessel	Name and Address of Operator
1	Mollie B	Survey Vessel	Anderson Marine Surveys Ltd - PA21 2DY
2			
3			
4			
5			

(c) Further details of any vessel(s) undertaking deposit or removal activities (please note that a marine licence cannot be issued until the vessel details have been confirmed. Continue on a separate sheet if necessary):

Vessel	Vessel Role (e.g guard or fisheries liaison)	Vessel to be Stationary (include length of time to be stationary)
1	Survey vessel	Vessel will be stationary to deploy the dye for less than 10 minutes. It will then track the dye patch.
2		
3		
4		
5		

7. Noise Monitoring

Will loud, low to mid frequency (10Hz to 10kHz) impulsive noise be produced by the project? YES NO

If **YES**, which please indicate the noise generating activities and sound frequencies:

Noise Generating Activity	Sound Frequency (Hertz)
Use of Explosives	
Use of Acoustic Deterrent Devices	

Other (please describe below):	

If you have ticked **YES**, please complete the Noise Registry – Initial Registration form located at: <http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

A marine licence application will not be accepted until this form has been completed and submitted.

8. Scotland’s National Marine Plan

Have you considered the application with reference to Scotland’s National Marine Plan?

YES NO

If **YES**, provide details of considerations made including reference to the policies that have been considered:

The purpose of this research is to support the development of a Delft 3D model for the Firth of Clyde to be used to determine the fate and behaviour of discharges from 3 proposed aquaculture sites and determine their impact on water quality and the ecological status of the water body. This work is therefore aligned with Objective 7 of the National Marine Plan: 7) Aquaculture. Objective 7 - to support research and development to improve knowledge and understanding of the requirements for sustainability of the industry.

The research is also working to determine the limit that the area can sustainably support the aquaculture industry, therefore is also aligned with Marine planning policy 1 of the National Marine Plan - Marine planners and decision makers should seek to identify appropriate locations for future aquaculture development where system carrying capacity (at the scale of a water body or loch system) should be a key consideration.

The application also considers the following contextual points in Section 7 of the National Marine Plan pertaining to environmental standards of the aquaculture industry:
Contextual point 7.11 - Aquaculture sites require rigorous long-term maintenance of good environmental standards and absence of pollution.
Contextual point 7.16 - Ensuring farms are located so that they do not negatively affect the carrying capacity of the environment.

If **NO**, please provide an explanation of why you haven’t considered the National Marine Plan?

9. Consultation

List all bodies you have consulted and provide copies of correspondence:

SEPA - email describing approach to model validation discussion with Dr A Berkley at SEPA is provided.

10. Associated Works

Provide details of other related marine projects, including reference/licence numbers (if applicable):