

Application for a Band 1 Marine Licence

Project description

Project name

Seabed sampling Teaching. School of Ocean Science, Bangor University.

Please provide a brief description of the proposed project, including location.

SCIENTIFIC RESEARCH EDUCATION (Undergraduate and Postgraduate studies). To teach and demonstrate various sediment and Benthic sampling techniques (see method statement) then analyse samples at the labs in Menai Bridge for environmental impact assessment / population surveys/ grain size analysis and sediment mechanics . The sampling will predominantly take place within the water bodies of North Anglesey and North Wales (up to Rhyl).However depending on student projects some samples may also be collected/required from the Skerries, Caernarfon Bay North or the Menai Straits waterbodies.

The work will be done using University vessels RV Prince Madog, Macoma or Mya and will be predominantly take place between September and December with occasional trips for postgraduate project work happening throughout the rest of the year.

The average sample size will be less than 0.002 M³ (2ltrs) in volume,. see method statement for full details.

Applicant details

To whom the licence will be issued. This must be a legal entity such as an individual, registered company/ charity or public body.

Title	Professor
Full name	John Turner
Company or trading name	School of Ocean Science
Company Registration Number (if applicable)	Charity number 1141565
Name of contact or individual (if different)	Ian Pritchard
Position in company	Chief Technician
Address (provide registered company address if applicable)	School of Ocean Science Askew street Menai Bridge
Postcode	LL59 5AB
Telephone number	07818017214
Email address	i.d.pritchard@bangor.ac.uk

Details of agent, contractor, vehicles and/or vessels used to carry out works

Does the applicant wish to be included in all correspondence?

Yes

Will the works require the use of vessels?

Yes

Will the works require the use of any vehicles?

No

Proposed project details

Licensable period

Determination of applications will be based on the works taking place during these dates. Please ensure you have included an adequate contingency period. If works are not completed by the requested licence expiry date you may be required to submit a new application. Including a contingency period within your original application does not impact on the licence fee.

Start date (DD/MM/YYYY) June 2023

Requested licence expiry date (DD/MM/YYYY) June 2024

Please detail the location of the proposed project.

This should be either Ordnance Survey National Grid Reference (i.e. SN 12345 67890) or Latitude and Longitude in decimal degrees to 4 decimal places (i.e. Lat 52.1234 Long -4.1234), defining the extent of the project. Please specify which coordinate system has been used and if using GIS co-ordinates, specify which projection has been used.

Please see attached method statements for Maps1 and 2 and coordinate data.

Method statement

Are the works within a sensitive area or one of the following activities: boreholes, replacement piles or beach management?

No

Method statement

You can upload your method statement here or fill in the questions below.

- File: 2023 Maps of sampling area Part I and Part II updated Katrien.docx - [Download](#)
- File: Anglesey_polygon_April2023_points.txt - [Download](#)
- File: Teaching_polygon_April2023_points.txt - [Download](#)

Please give a brief method statement outlining the proposed project

Collect Sediment and Benthic samples for undergraduate and postgraduate teaching
Part I : RV Prince Madog will be taking students out on a series of day trips to collect Sediment and Benthic samples using the Day Grab (Benthic) , Shipeck Grab (Sediment) and Gravity corer (Sediment),the sample sites are not pre determined but will be taken within the marked area of Map 1. When on station the ship will disengage power, then the Grab/corer will be deployed off the stern and allowed to freefall through the water column, after contact with the bottom the Grab/Corer will be retrieved using a winch. Once on deck the samples from the shipeck and Gravity corer are stored and labelled accordingly; For the day grab the students will sieve the sample and retain everything >1mm then store in a labelled bucket. All samples are then transported back to Ocean science for fixing (if required) and further analysis. After each station the equipment is thoroughly cleaned and rinsed down.

SAMPLER DETAILS QUANTATITY & VOLUME OF SAMPLES EXTRACTED

Day Grab Typical sample size 0.005 m^3 (5tr). Maximum no Samples 150 . Total Volume $\sim 0.75 \text{ m}^3$.
Shipeck Grab Typical sample size 0.001 m^3 (1ltr). Maximum no samples 120. Total Volume $\sim 0.12 \text{ m}^3$
Gravity Corer Typical sample size 0.008 m^3 (8 ltr). Maximum no Samples 10. Total Volume $\sim 0.08 \text{ m}^3$
TOTAL VOLUME OF SEDIMENT EXTRACTED FOR PART 1 = $\sim 0.95 \text{ M}^3$ ($0.75 + 0.12 + 0.08$)

PART II: Collect samples for undergraduate and postgraduate projects, sites yet to be determined but could be anywhere in the waterbodies surrounding Anglesey and North Wales see Map 2. Most of these samples will be collected using the smaller University boats Macoma or Mya with the occasional samples taken onboard the RV Prince Madog.

On the smaller vessels, boat operation will be the same as for PART I ,but the smaller more lightweight Van Veen grab will be used for sampling. The Van Veen Grab is deployed by hand over the side and allowed to freefall the final few meters before hitting the bottom. It is then hauled back on deck by hand. Samples are then bagged and labelled for further analysis..

SAMPLER DETAILS QUANTATITY & VOLUME OF SAMPLES EXTRACTED

Van Veen Grab Typical sample size 0.001 m^3 (1ltr). Maximum no samples 150 Total Volume $\sim 0.15 \text{ m}^3$

ESTIMATED TOTAL VOLUME OF SEDIMENT EXTRACTED FOR THE PROJECT

0.95 M^3 (Part I) + 0.15 M^3 (Part II)

= 1.1 M^3

Please state the measures to be taken to minimise risk to the marine environment

Anchor will not be used when on station.

On day trips . No formalin will be used onboard , biological fixing will be done back at base.

Students have a briefing/Induction which includes Personal safety and Social responsibility (PSSR) highlighting the importance of not disposing of anything overboard. Equipment to be thoroughly cleaned and washed between stations.

If any non native species are sampled they will be retained and disposed of accordingly, position will be noted and NRW informed.

No Sampling within 50m of any sensitive areas or historical sites unless prior permission has been given from the relevant bodies. Student projects that sample these sensitive sites are usually done in collaboration with the relevant bodies i.e NRW .

Please state the measures to be taken to prevent undue interference to others

-Sampling time kept to a minimum less than 10 minutes per station

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- Sampling will be paused if other vessels are in close proximity.

- If other vessels are occupying the position of the sampling station then a sample will be taken a safe distance away from that vessel.

- Captain/Skipper to stay vigilant of any danger.

Please state the measures to be taken to maintain navigational safety, including marking and lighting of works

All operations will be conducted in accordance with the International Regulations for preventing Collisions at Sea (COLREGS).

the correct shapes and light sequence will exhibited accordingly (COLREGS).

Sampling time kept to a minimum.

Captain/Skipper to stay vigilant of any danger.

Materials of the project

Will the works involve removals seaward of MHWS?

Yes

Description of materials to be removed seaward of MHWS (Please tick all that apply)

Silt

Gravel

Sand

Description of objects/materials to be removed seaward of MHWS, including quantities to be removed.

SEDIMENT AND BENTHIC SAMPLES FOR SCIENTIFIC RESEARCH
SAMPLER DETAILS QUANTITY & VOLUME OF SAMPLES EXTRACTED
Day Grab Typical sample size 0.005 m³ (4tr). Maximum no Samples 150 . Total Volume ~ 0.75m³.
Shipeck Grab Typical sample size 0.001m³ (1ltr). Maximum no samples 120. Total Volume ~0.12m³
Gravity Corer Typical sample size 0.008m³(8 ltr). Maximum no Samples 10. Total Volume ~ 0.08m³
Van Veen Grab Typical sample size 0.001m³ (1ltr). Maximum no samples 150 Total Volume~0.15m³
TOTAL ESTIMATED VOLUME OF SEDIMENT EXTRACTED FOR PROJECT (0.75+0.12+0.08+0.15) = 1.1 M³

Additional information

Please provide the following:

You must include a suitably scaled extract of an Ordnance Survey Map or Admiralty Chart with location of project complete with north arrow and scale

You must include details of correspondence with MCA, Trinity House and The Crown Estate

Correspondence with RCAHWW (B1 removals only)

Please upload these below

- File: Correspondance archeology.pdf - [Download](#)
- File: signed and dated Sr-BgU-14.pdf - [Download](#)
- File: correspondance Navigation MCA.pdf - [Download](#)

Please list below all supporting documents that have been submitted with this application.

RCAHMW Correspondance
Crown Licence Sr-BgU-14
Navigation MCA Correspondance

Statutory powers

Does the applicant have statutory powers to consent any aspect of the project? e.g. coast protection authority, dredging powers, statutory undertakers

No

Public register

Is there any information contained within or provided in support of this application that you consider should NOT be included on the Public Register on the grounds that its disclosure:

	Yes	No
Would be contrary to the interest of National Security?		X
Would prejudice to an unreasonable degree you, or some other person's commercial interest or those of a third party?		X

Application fee

Please provide the method of payment

World pay (please contact the Permit Receipt Centre)

Declaration

I declare that to the best of my knowledge and belief that the information given in this application form and supporting documentation is true.

WARNING: It is an offence under the Marine and Coastal Access Act 2009, under which this application is made, to fail to disclose information or to provide false or misleading information. This could invalidate any licence granted.

Name Ian Pritchard
Date 28 April 2023
Position in company Chief Technician

If you would like a copy of your completed form, please add your preferred email address below:

i.d.pritchard@bangor.ac.uk