

Apply for a Band 1 marine licence

Project description

Project name

Resubmission RML 2438 - SEABED SAMPLING, 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 .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.

Does the activity have an estimated project cost for marine works over £1 million? If yes, the activity is no longer eligible for a band 1 application and a band 3 application will be required.

No

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	Profesor
Full name	John Turner
Company or trading name	School of Ocean Science, Bangor University
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, Anglesey. - -
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)	8 June 2024
Requested licence expiry date (DD/MM/YYYY)	8 June 2025

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.
The application is for permission and access to sampling sites within several polygons covering the whole of the North wales area. But does not include sampling of sensitive sites within these polygons. Please see attached GIS file

Method statement

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

Band 1 method statement template

Please provide a brief summary of the application including location of the works (coordinates - lat/long, decimal degrees). For activities that cover a large area please provide coordinates of the approximate extent of works.

Application to carry out scientific sampling of seabed using a selection of techniques for teaching purposes. The application will cover the water bodies of North Wales (see attached maps and GIS data). It is primarily to demonstrate the various techniques of sediment sampling to students whilst also collecting samples/data for classroom activities, MSc and PhD students. The Majority of the work will be conducted within the area marked Part 1, Map 1. But on some occasions samples will be taken within the area of Map 2, this will be dependant on student MSc and PhD projects.

Scope of works

Please provide a full description of all proposed works including: Sequence of works (mobilisation, marine works, site remediation (if required)) Estimated timing of works (duration, working hours, day/night, plus contingency) Plant, machinery or vessel required Estimated quantities (removals, deposits, construction materials)

Mobilisation of boats including RV Prince Madog will be conducted on St Georges Pier, Menai Bridge. All sampling gear are transported to the ship from the Laing Building (also the location of pier master) using a battery operated tow truck.

Sampling stations are determined by the principle scientist but will be adjusted on the day according to weather, tides, and available time etc. No sampling will be conducted within 50m of historical or sensitive sites, Unless prior consent from NRW.

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 avoiding all sensitive sites.

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 Max sample size 0.012 m^3 (12tr). Maximum no Samples 150. Total Volume $\sim 1.8 \text{ m}^3$.
Shipeck Grab Max sample size 0.003 m^3 (3ltr). Maximum no samples 120. Total Volume $\sim 0.36 \text{ m}^3$
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 = $\sim 2.24 \text{ M}^3$ ($1.8 + 0.36 + 0.08$)

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 Max sample size 0.0012 m^3 (1.2ltr). Maximum no samples 150 Total Volume $\sim 0.18 \text{ m}^3$
THE MAXIMUM TOTAL VOLUME OF SEDIMENT EXTRACTED FOR THE PROJECT
 2.24 M^3 (Part I) + 0.18 M^3 (Part II)
 $= 2.42 \text{ M}^3$

Access and working areas

Please provide details of access to the site and working areas. This should include:
Attached map of the access/egress route and working areas (annotated aerial image and/or OS map)
Predicted plant/vehicle movements
Storage areas for plant, equipment and materials (if required)
Risks to navigation

Ship or Boat will be on sampling station for a maximum time of 10 minutes. The equipment is minimal and operates on gravity, and retrieved by using a winch.

Risk to Navigation will be mitigated by

Continuous communication with relevant authorities
Displaying the relevant shapes/lights under COLREGS when on station.
No sampling within IMO TSS (Traffic separation scheme)

Environmental mitigation

Please list appropriate mitigation measures to minimise impacts on the marine environment these may include: Pollution prevention and control procedure (guidance available on the NetRegs website) Spill response kits Minimise plant traffic Designated access and egress routes Storage of materials (fuel, chemicals, construction waste) Biosecurity (guidance available at <http://www.snh.gov.uk/docs/A1294630.pdf>)
Note: To assist you, the following mitigation statements will be used as conditions within the licence. By signing this method statement you will be agreeing to adhere to these restrictions. If you are unable to do this, the application will not qualify as Band 1. All equipment, temporary structures, access tracks, waste and/or debris associated with the works will be removed on completion of the works. Bunding, storage facilities and spill kits will be employed to contain and prevent the release of fuel, oils and chemicals associated with the plant, refuelling and construction equipment into the marine environment. Plant, vehicles and machinery will not be refuelled on the foreshore. Coatings and treatments will be suitable for use in the marine environment and are used in accordance with best environmental practice. All equipment, materials, machinery and PPE used will be in a clean condition prior to their arrival on site, and upon removal from site, to minimise risk of introducing non-native species into the marine environment. In the event of removal of any sensitive species or habitat designated by NRW under Schedule 7 of the Environment (Wales) Act 2016, no further removals will occur at that location or within 20m of that location.

Please list your bespoke mitigations here:

CHEMICALS

-Chemicals for fixing i.e formalin , only to be taken on board when ship is out for more than 1 day. All day trips, samples to be fixed in the Cemlyn Jones lab when back on shore.

- If Chemicals are taken on Board - Quantity will be minimal
- securely stored with secondary containment at least 110% of the volume.
- No glass containers
- Secured by tying down/ elasticated cord
- Spill kit readily available
- Dosing to be done with auto dispenser in fume hood.
- Fume hood fitted with a drip tray.

BIOSECURITY

- All equipment must be clean prior Mobilisation.
- Equipment must be thoroughly washed down between each station.
- Any samples that contain non native species must be reported to NRW with coordinates.
- Discovery of unrecorded beds of sensitive species or habitats to be reported to NRW with coordinates, no further samples to be taken.

Additional information

Please list any additional information that may help with the application:
Consents/permissions required List of plans or drawings attached to method statement
Emergency procedures Contact details

CROWN ESTATE - Licence number SR_BgU_17.

Materials of the project

Description of materials to be deposited seaward of Mean High Water Springs (MHWS) (Please tick all that apply)

Other (please provide a description of materials):
NO MATERIALS INVOLVED HOWEVER WHEN USING THE DAY GRAB SOME OF THE FINES <1MM WILL
BE RETURNED BACK TO SEA . ROUGHLY BETWEEN 0.00050 .001M³ PER SAMPLE

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 0.012 m³ (12ltr). Maximum no Samples 150 . Total Volume ~ 1.8m³.
Shipeck Grab Typical sample size 0.003m³ (3ltr). Maximum no samples 120. Total Volume ~0.36m³
Gravity Corer Typical sample size 0.008m³(8 ltr). Maximum no Samples 10. Total Volume ~ 0.08m³
Van Veen Grab Typical sample size 0.0012m³ (1.2ltr). Maximum no samples 150 Total
Volume~0.18m³
TOTAL ESTIMATED VOLUME OF SEDIMENT EXTRACTED FOR PROJECT (1.8+0.12+0.08+0.18) = 2.42
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: Archaeology RCAHMMW - Correspondance 2024.pdf - [Download](#)
- File: Crown Estate SR-BgU-17 Correspondance.pdf - [Download](#)
- File: Trinity house - Navigation..pdf - [Download](#)
- File: 2023 Maps of sampling area Part I and Part II updated Katrien.docx - [Download](#)
- File: Anglesey_polygon_April2023_points_excel.xlsx - [Download](#)
- File: Teaching_polygon_April2023_points_excel.xlsx - [Download](#)
- File: Anglesey_polygon_April2023_points.txt - [Download](#)
- File: Teaching_polygon_April2023_points.txt - [Download](#)
- File: MCA Correspondance.pdf - [Download](#)
- File: Receipt of Payment NRW.pdf - [Download](#)

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

Trinity house correspondence
RCAHMMW Correspondence
Crown Estate Correspondence
Maps and GIS info
MCA Correspondence
Copy of receipt

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

Reference number (not BACS remittance no.)
Paid please see receipt in attached files

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	13 June 2024
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