Form 1: Pre-activity notice

Regulation 11(a), Exclusive Economic Zone and Continental Shelf (Environmental Effects–Permitted Activities) Regulations 2013

How to use this form:
This form should be completed by organisations planning to carry out a permitted activity (except seismic survey) as defined in the Exclusive Economic Zone and Continental Shelf (Environmental Effects-Permitted Activities) Regulations 2013. It fulfils, in part, the pre-activity requirements of Schedule 1 of the Regulations.

This form must be provided to the Environmental Protection Authority (EPA) at least 40 working days before commencing the activity.

Note: Items marked in italics are non-compulsory fields; however, inclusion of this information will assist the EPA in processing this form.

Please note that this completed form, once received and processed by EPA, will be posted on the EPA website.

Submitting in hard copy:
If you wish to provide this form in hard copy, please post your completed form to: Environmental Protection Authority, Private Bag 63002, Wellington, 6140.

Submitting electronically:
If you wish to provide this form electronically, please email your form to: eez.compliance@epa.govt.nz

Any form submitted electronically should be attached to an email that sets out:
- The details of the person undertaking the permitted activity (the operator);
- The name of the person supplying the completed form; and
- A statement that the person is authorised to supply the form on behalf of the operator.

Note: there is an 8 MB limit on electronic files submitted via email.

All forms prescribed by the Exclusive Economic Zone and Continental Shelf (Environmental Effects – Permitted Activities) Regulations 2013, as well as suggested templates for providing other information, may be viewed and downloaded from our website at www.epa.govt.nz or requested by contacting us:

Private Bag 63002, Wellington, 6140
Email info@epa.govt.nz
Ph +64 4 916 2426
Fax +64 4 914 0433
Operation name:
Name used by operator to reference the activity described in this form: SEA cruise S264

Details of person undertaking permitted activity

<table>
<thead>
<tr>
<th>Company name:</th>
<th>Sea Education Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact person:</td>
<td>Sarah Fuller (office) and Dr. Benjamin Harden (shipboard)</td>
</tr>
<tr>
<td>Phone number:</td>
<td>508-444-1922 (office)</td>
</tr>
<tr>
<td>Mobile number:</td>
<td></td>
</tr>
<tr>
<td>Fax number:</td>
<td>508-457-4673</td>
</tr>
<tr>
<td>Physical address:</td>
<td>171 Woods Hole Road, Falmouth, MA USA</td>
</tr>
<tr>
<td>Postal address (if different)</td>
<td>PO Box 6, Woods Hole, MA USA</td>
</tr>
<tr>
<td>Email address:</td>
<td><a href="mailto:sfuller@sea.edu">sfuller@sea.edu</a>, <a href="mailto:bharden@sea.edu">bharden@sea.edu</a></td>
</tr>
</tbody>
</table>

General description of permitted activity

<table>
<thead>
<tr>
<th>Type of activity:</th>
<th>Marine scientific research and undergraduate student education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of methods to be used to undertake the activity:</td>
<td>Continuous underway measurements of: current magnitude and direction via ADCP; single-beam bathymetry; surface seawater temperature, salinity, CDOM fluorescence, transmissivity, and chlorophyll fluorescence via flow-thru system. In situ Station-based work: upper water column CTD profiles; discrete water samples collected by Niskin bottle for chemical analysis (nitrate, phosphate, silicate, dissolved oxygen, chlorophyll concentration, pH, total and carbonate alkalinity, and abundance of microplastic particles); surface and near-surface zooplankton biodiversity and abundance assessed by net tow (333um mesh); surface and near-surface phytoplankton biodiversity and abundance assessed by drifted phytoplankton net (63um mesh); seafloor sediment sampling by shipek grab.</td>
</tr>
</tbody>
</table>

Timing of permitted activity

<table>
<thead>
<tr>
<th>Proposed commencement date:</th>
<th>17 February 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximate duration of activity (in days):</td>
<td>39 days</td>
</tr>
<tr>
<td>Timetable:</td>
<td>Underway measurements (surface flow-thru, bathymetry and currents) will be recorded continuously during the cruise once the ship departs port. Water column sampling and net tows will occur twice daily for the duration of the cruise. Program Begins (Auckland, NZ): 17 February 2016</td>
</tr>
</tbody>
</table>
Timetable (continued):

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underway/sampling</td>
<td>17 February - 24 February 2016</td>
</tr>
<tr>
<td>In port (Russell)/no</td>
<td>24 February - 26 February 2016</td>
</tr>
</tbody>
</table>
| sampling                  | In port (Wellington)/no           | 10 March – 13 March 2016
| sampling                  | In port (Dunedin)/no              | 19 March – 22 March 2016
| sampling                  | Underway/sampling                 | 22 March – 25 March 2016

Location of permitted activity

Co-ordinates of area where activity will be undertaken:

(latitude and longitude)

The SSV Robert C. Seamans plans to sail off shore of the eastern coast of New Zealand within a polygon bounded by the following corners:

1. 35°25.1’S x 176°08.8’E
2. 36°58.8’S x 179°38.4’E
3. 45°03.3’S x 175°44.1’E
4. 44°43.4’S x 172°05.3’E

Within the polygon, the proposed in situ sampling stations will include, but are not limited to:

5. 35°36.0’S x 176°6.0’E
6. 37°00.0’S x 179°59.0’E
7. 39°45.0’S x 178°30.0’E
8. 42°00.0’S x 177°05.0’E
9. 43°45.0’S x 176°00.0’E
10. 42°00.0’S x 175°08.0’E
11. 42°07.0’S x 174°14.0’E
12. 44°35.0’S x 174°00.0’E
13. 44°35.0’S x 172°15.0’E

The ship will then sail into Auckland.

If weather requires, the ship will alter routes and stations.

Description of the current state of the area and the surrounding environment, including any known sensitive environments:

All water column research will occur in offshore pelagic settings. Occasional benthic sampling by shipek grab will be limited to 250 cubic centimetres of surface sediment on muddy substrate. We do not plan to sample or interact with any sensitive environments.

Description of the likely effects of the activity on the environment:

Water column sampling activities focus on the upper water column and will not impact any sensitive environments. We will remove small volumes of seawater for chemical analysis and daily net tows will collect small zooplankton.

Benthic sampling by shipek grab will be limited to 250 cubic centimetres of surface sediment on muddy substrate at the following stations (from the list above):

1. 35°36.0’S x 176°6.0’E
2. 43°45.0’S x 176°00.0’E
3. 42°00.0’S x 175°08.0’E
4. 42°07.0’S x 174°14.0’E
5. 44°35.0’S x 172°15.0’E

Other information
**Name of ship involved in activity:**  
SSV Robert C. Seamans

**International call sign or vessel number of the ship:**  
WDA 4486

**Associated licence number (under the Continental Shelf Act 1964):**  
Not applicable

**Associated permit number (under the Crown Minerals Act 1991):**  
Not applicable

19 November 2015

**Signature of authorised contact person**  
Name: Sarah Fuller  
Title: Science Program Coordinator

**Note:** A signature is not required for electronic (email) forms.