Form 3: Initial environmental assessment and sensitive environments contingency plan

Regulation 11(c), 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 marine scientific research, prospecting, or exploration. It fulfils the initial environmental assessment and contingency plan requirements of Schedule 2 of the Exclusive Economic Zone and Continental Shelf (Environmental Effects – Permitted Activities) Regulations 2013.

This form must be provided to the Environmental Protection Authority (EPA) at least 5 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

New Zealand Government

www.epa.govt.nz
**Operation name:**

Name used by operator to reference the activity described in this form:

**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></td>
</tr>
<tr>
<td>Phone number</td>
<td></td>
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<tr>
<td><strong>Mobile number:</strong></td>
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<tr>
<td><strong>Fax number:</strong></td>
<td></td>
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<tr>
<td><strong>Physical address:</strong></td>
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<td><strong>Postcode:</strong></td>
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<tr>
<td><strong>Postal address (if different):</strong></td>
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<tr>
<td><strong>Postcode:</strong></td>
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<tr>
<td>Email address</td>
<td></td>
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</tbody>
</table>

**General description of permitted activity**

**Type of activity:**
(e.g. marine scientific research, prospecting)

Marine scientific research and undergraduate student education

**Description of methods to be used to undertake the activity:**

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.

**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 175°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

Jun 2013 EPA0263
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

Identification of sensitive environments

Describe any sensitive environments likely to exist in the area where the activity will be undertaken:

No sensitive environments have been identified in the proposed sampling areas nor were noted in response to the previously submitted EPA forms.
Contingency plan

Specify measures that could be taken to avoid, remedy, or mitigate the adverse effects of the activity on sensitive environments:

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Can the activity be undertaken in another place?</td>
<td>Yes / No*</td>
<td>Explain: Our sampling locations are very flexible. If there are areas of sensitive sites we should avoid, that is entirely possible so long as we know where they are.</td>
</tr>
<tr>
<td>b) Can the activity be undertaken in a way that reduces the amount of contact with the seabed?</td>
<td>Yes / No*</td>
<td>Explain: The majority of the proposed sampling will interact with the upper water column only, never contacting the seafloor. The exception is benthic sampling by shipek grab that will be limited to 250 cubic centimetres of surface sediment on muddy substrate at the five previously indicated stations.</td>
</tr>
<tr>
<td>c) Can different methods be used in undertaking the activity to lessen its effects on the sensitive environment?</td>
<td>Yes / No*</td>
<td>Explain: The described equipment are the least invasive collection methods available on our research vessel.</td>
</tr>
<tr>
<td>d) Can the activity be undertaken in a way that lessens its effects in the sensitive environment?</td>
<td>Yes / No*</td>
<td>Explain: We anticipate no effects on sensitive environments.</td>
</tr>
</tbody>
</table>

* Select one

05 February 2016

Signature of authorised contact person

Name: [

Title: [ ]

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