Permitted activities: Pre-activity notice

Form 1 of Schedule 5 of the Exclusive Economic Zone and Continental Shelf (Environmental Effects – Permitted Activities) Regulations 2013

How to use this form: This form must be completed by organisations planning to carry out a permitted activity (except seismic surveying) in accordance with:

- regulation 5, 6 or 8 of the Exclusive Economic Zone and Continental Shelf (Environmental Effects – Permitted Activities) Regulations 2013 (PA Regulations 2013); or
- regulation 7, 8 or 9 of the Exclusive Economic Zone and Continental Shelf (Environmental Effects – Discharge and Dumping) Regulations 2015 (D&D Regulations 2015).

This form fulfils the pre-activity reporting requirements under regulation 11(a) of the PA Regulations 2013 and regulation 12(2) of the D&D Regulations 2015.

Timeframe: You must provide this form to the Environmental Protection Authority (EPA) no less than 40 working days before starting the activity.

Note: Items marked in italics are not compulsory; however, including this information will help the EPA process the form.

This completed form, once received and processed by the EPA, will be posted on the EPA website.

Submitting in hard copy: If you wish to provide the completed form in hard copy, post it to Environmental Protection Authority, Private Bag 63002, Wellington 6140 or fax it to +64 4 914 0433.

Submitting electronically: If you wish to provide the completed form electronically, email it to permitted.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
- a statement that the person is authorised to supply the form on behalf of the operator.

Note: The EPA has an 8 MB limit on electronic files submitted by email.
Operation name: SEA Cruise S276

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

Details of person undertaking permitted activity

<table>
<thead>
<tr>
<th>Name of company, organisation or person:</th>
<th>Sea Education Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact person:</td>
<td></td>
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<tr>
<td>Phone number:</td>
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<tr>
<td>Mobile number:</td>
<td>Fax number:</td>
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<tr>
<td>Physical address:</td>
<td>Postcode:</td>
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<tr>
<td>Postal address (if different):</td>
<td>Postcode:</td>
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<tr>
<td>Email address:</td>
<td></td>
</tr>
</tbody>
</table>

General description of permitted activity

<table>
<thead>
<tr>
<th>Type of activity:</th>
<th>Description of methods to be used to undertake the activity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine scientific research</td>
<td>Continuous underway measurements of: current magnitude and direction via ADCP; single-beam bathymetry with 3.5 kHz CHIRP; surface seawater temperature, salinity, colored dissolved organic matter (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 (plankton nets with 333μm mesh, rarely do we catch non-gelatinous organisms larger than 3-4cm body diameter or length); surface and near-surface phytoplankton biodiversity and abundance assessed by drifted phytoplankton net (63um mesh). In addition to instrument-driven observation we will also conduct hourly visual surveys (0600-1800 hours) of marine debris, marine mammals, seabirds, fish and sea turtles. Enumeration of marine debris and fauna (e.g., seabirds, marine mammals, etc.) will be augmented with aerial surveys using a drone equipped with a digital recording device (e.g., Phantom 3 or similar model ~400m range, where permissible).</td>
</tr>
<tr>
<td>Prospecting</td>
<td>Discharge of sediments from iron sand prospecting and exploration</td>
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<tr>
<td>Exploration</td>
<td>Incidental discharge of sediments from phosphate nodule or placer gold prospecting and exploration</td>
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<tr>
<td>Placement or removal of submarine cables</td>
<td>Discharge of sediments from seafloor massive sulphide prospecting and exploration</td>
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</tbody>
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### Timing of permitted activity

<table>
<thead>
<tr>
<th>Proposed start date:</th>
<th>12/11/2017</th>
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<tbody>
<tr>
<td>Approximate duration of activity:</td>
<td>56 days</td>
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<tr>
<td><strong>Timetable:</strong></td>
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</table>

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 approximately twice daily for the duration of the cruise.

- **Program Begins (Auckland, NZ):** 12 November 2017 (leg 1)
- In port (Russell)/no sampling: 15 November - 19 November 2017
- **Underway/sampling:** 19 November - 21 November 2017
- In port (Napier)/no sampling: 21 November - 11 December 2017
- **Underway/sampling:** 11 December - 13 December 2017
- **Program Ends (Auckland, NZ):** 13 December - 21 December 2017
- In port (Auckland)/no sampling: 21 December 2017 (Leg 1)
- **Program Begins (Auckland, NZ):** 21 December 2017 - 29 December 2017
- **Underway/sampling:** 29 December 2017 - 6 January 2018
- **Program Ends (Auckland, NZ):** 6 January 2018 (Leg 2)

### Location of permitted activity

**Co-ordinates of area where activity will be undertaken:**

(Provide four sets of co-ordinates in latitude and longitude or submit a shape file or KML/KMZ file.)

<table>
<thead>
<tr>
<th>Set 1</th>
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<tbody>
<tr>
<td>Set 2</td>
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<td>Set 3</td>
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<tr>
<td>Set 4</td>
<td></td>
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</tbody>
</table>

☒ I have attached a shape or KML/KMZ file

**Map:**

(Provide a map that shows the location of your activity relative to the New Zealand coastline)
The SSV Robert C. Seamans plans to sail off shore of the north eastern coast of the north island of New Zealand within a polygon bounded by the following coordinates:

**Leg 1 (S276):**

1. 35°43'53.24"S; 175°17'50.71"E
2. 36° 7'5.50"S; 175°17'39.83"E
3. 36°28'1.12"S; 175°41'8.97"E
4. 36°28'58.86"S; 175°58'4.02"E
5. 36°41'49.41"S; 176° 8'11.07"E
6. 37°40'12.48"S; 176°29'22.93"E
7. 37°47'47.20"S; 176°51'38.03"E
8. 37°48'32.11"S; 177°18'0.58"E
9. 37°28'18.75"S; 177°55'20.82"E
10. 37°25'56.90"S; 178°15'27.44"E
11. 37°38'43.68"S; 178°45'46.08"E
12. 38°23'19.52"S; 178°55'5.00"E
13. 39° 12.25"S; 178°40'5.04"E
14. 39°47'29.63"S; 177°59'51.89"E
15. 39°37'43.89"S; 177°17'59.57"E
16. 40° 13'4.55"S; 177°25'34.07"E
17. 40°13'23.90"S; 179° 9'33.72"E
18. 39°28'31.93"S; 178°50'17.33"W
19. 29°54'17.98"S; 176°55'32.46"W
20. 28°54'2.47"S; 177°14'32.24"W
21. 28°48'43.83"S; 177°52'0.55"W
22. 29°22'4.26"S; 177°41'43.89"E
23. 34°13'20.29"S; 173°45'22.82"E
24. 35°13'25.22"S; 174°28'32.04"E

Due to our educational mission, we seldom have exact locations where we need to sample; however, we will keep our sampling to the bounds of the polygons coordinates (Figure 2).

**Leg 1**

*Figure 1. Proposed cruise track for Leg 1, in yellow: S276 Cruise Plan*  
*Figure 2. Proposed sampling polygon for Leg 1: S276 Cruise Plan*
The vessel will then sail into Auckland and be in port for 9 days prior to the start of the second leg (S276A). During this leg we will keep our sampling to the bounds of the following polygon coordinates (Figure 4):

**Leg 2 (S276A):**
1. 34°16'31.58"S; 173°53'9.84"E
2. 35°13'29.98"S; 174°28'57.51"E
3. 35°46'11.44"S; 175°12'27.01"E
4. 36°10'49.80"S; 175°18'18.66"E
5. 36°45'6.79"S; 176°21'12.10"E
6. 37°17'57.80"S; 176°18'37.06"E
7. 37°44'16.97"S; 176°46'0.13"E
8. 37°45'1.28"S; 177°23'5.81"E
9. 37°31'42.62"S; 177°43'59.15"E
10. 37°22'11.66"S; 178°14'33.55"E
11. 37°29'13.64"S; 178°52'26.03"E
12. 38° 3'45.84"S; 178°54'11.59"E
13. 36°44'28.99"S; 178°35'52.64"W
14. 32°17'26.68"S; 176°13'34.32"E
15. 32° 7'25.93"S; 175°29'47.90"E
16. 34°17'13.78"S; 173°51'59.39"E
17. 35° 8'46.29"S; 174°29'2.23"E

**Figure 3.** Proposed cruise track for Leg 2 in **Yellow:** S276A Cruise Plan

**Figure 4.** Proposed sampling polygon for Leg 2: S276A Cruise Plan

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**Describe 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. We do not plan to sample or interact with any sensitive environments. There will be no sampling in designated NZ Marine Reserves.

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**Describe 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.
Name of the ship involved in the 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

Funding and cost recovery

The EPA recovers costs in accordance with section 143 of the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012, Exclusive Economic Zone and Continental Shelf (Fees and Charges) Regulations 2013, and EPA Cost Recovery Policy for the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 and Regulations. The policy specifies that the EPA will not recover costs for domestic or international marine scientific research where proof of government funding is provided.

To help the EPA determine whether you are eligible for cost recovery exemption under the policy, fill out the section below.

Is this activity receiving any government funding?

☐ Yes ☑ No (go to the next section)

If yes, provide details and attach any proof of such funding:

☐ ☐ ☐ ☐ ☐
Where the EPA is required to recover costs associated with the permitted activity to which this form relates, it will invoice the company, organisation or person named on this form. The invoice will be addressed to the named contact person.

**Delivery details for the invoice if different from those given on page 2**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postal address</td>
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<tr>
<td>Contact person</td>
<td></td>
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<tr>
<td>Email address</td>
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<tr>
<td>Purchase order number (if applicable)</td>
<td></td>
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</tbody>
</table>

Payment is expected by the 20th of the month following the month of issue of the invoice.

**Signature of authorised contact person**

Name: [Name]

Title: [Title]

Date 12/09/2017

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