Prince Edward Island
CANADA

Communities, Land and Environment

# Application for an Environmental Impact Assessment

(Pursuant to Section 9(1) of the *Environmental Protection Act*)

Personal information on this form is collected under Section 31(c) of the *Freedom of Information and Protection of Privacy Act* R.S.P.E.I. 1988, c. F-15.01 as it relates directly to and is necessary for evaluating applications for an Environmental Impact Assessment. If you have any questions about this collection of personal information, you may contact the coordinator, Environmental Assessment Section, Prince Edward Island Department of Communities, Land and Environment, (902) 368-5474.

**This form allows the proponent to provide a general summary of the proposed project so that the Environmental Assessment Section can determine whether it is an undertaking. All sections must be completed. If the project is determined to be an undertaking, the proponent will be required to provide an Environmental Impact Statement.**

| **Proponent Information** | | |
|---|---|---|
| Name (if corporation, please specify): 937825 Canada Ltd operating as Pure Island Waters | | |
| Mailing Address: #17 Granville, Charlottetown, PEI | | |
| | | Postal Code: C1A 2A1 |
| Tel (w): 902-628-5114 | Tel (h): | Fax: |
| E-mail: jwood1123@hotmail.ca | | |
| Principal Contact Person (if applicable): James Wood & Scott Dawson | | |
| Official Title: President | | Vice-President (213-5248) |
| Tel (w): 902-628-5114 | Tel (h): | Fax: |

| **Project Information** |
|---|
| Description: See Attached |

| **Location** | | |
|---|---|---|
| Property Tax No.: 225615 | Community: Brookvale, P.E.I. | |
| County: Queens | Road Name or Route No.: Route #13 | Civic Address No: — |

***Attach an appropriate scale property map indicating the site location.***

15EN15-42280

## Related Documents

vide a list of supporting documents provided with this application and/or indicate documents to be provided later):

See attached.

## Funding

List government agency(s) where funds are being requested:

None Requested to Date.

## Estimated Project Cost

What is the estimated final cost of the project? (not including land costs): 950,000.00

## Application Fee

Application fee amount based on the estimated project cost and the following fee structure: **$**

| Fee Structure | |
|---|---|
| **Cost of Project** | **Fee** |
| Under $200,000 | $100 |
| $200,000 to $999,999 | $500 |
| $1,000,000 to $2,499,999 | $2,500 |
| $2,500,000 and over | $10,000 |

## Signature

June 27, 2016
Date

Signature of Proponent

**Return the completed application form, along with the application fee, to:**

Environmental Assessment Coordinator
Environmental Impact Assessment Section
Department of Communities, Land and Environment
PO Box 2000
Charlottetown, PE C1A 7N8

Make cheques payable to the Minister of Finance.

***Please Note: Your application will not be processed until the application fee is received.***

For assistance with this form, please call the Environmental Impact Assessment Section at 368-5049 or visit our office (4th floor, Jones Building, 11 Kent Street, Charlottetown).

# *Pure Island Waters Ltd.*

## Business Description

**Prince Edward Island is well known for its primary industries; farming, fishing, and tourism. The Island has a wholesome image, and has little in the way of an industrial base. As part of that image, it is also known for the quality of its water. The whole island sits on a foundation of sandstone, which acts as a super filter for the water as it percolates down to the water aquifer. This source of water needs very little in the way of treatment to prepare it for human consumption. Visitors to the Island, almost without exception, comment on the quality of our water. So, it is clear that Prince Edward Island, "cradled in the waves", offers itself well as an excellent source for establishing a small water bottling operation.**

**The water quality, high pH and good mineralization, from Prince Edward Island allows us to position the bottled water as a premium product. It naturally has good mineral content and is strongly alkaline, which are both sought after in a bottled water product. The markets we believe we have an opportunity to develop are threefold; Atlantic Canada and New England; Ontario; China and Japan.**

**We are starting with a small bottling plant that will produce about three container loads per week from an 8 hour shift. This allows for some room for increasing production by adding a second shift (and even a third shift) if demand is as strong as we anticipate that it will be. A container load will accommodate about 28,000 litres of bottled water to stay within weight limits. We are looking at two sizes only, 500ml and 1 litre.**

**The initial water usage for the plant is equivalent to about the same as that used by ten households. Once we get to full capacity (within four years), we be using the same amount of water as forty seven households use. Also, we have found out that the average 18 hole golf course on PEI uses about 220 cubic metres per day (based on a 250 day per year usage to compare to the plant usage). This is more than double what the plant will use at its full final production level of 100 cubic metres per day. To reduce or eliminate our footprint on water usage within the watershed, we plan to establish methods to help reduce our impact, small as it is. We are aware that watershed associations are working within limited budgets, and there is much that can be done to work towards improving water volume and quality. With that in mind, we will be incorporating an annual donation to the watershed association into our budgets.**

**To achieve the necessary amount of water each day for the start-up volume, we will only require a drawdown at the rate of 3 gallons per minute over a 24 hour period (which equates to about 0.23 litres per second). Once we reach full planned capacity, the rate of extraction will be 15 gallons per minute (1.1 litres per second). These volumes are well below the levels that require a groundwater extraction permit, which is required for any wells that has extraction volumes exceeding 4 litres per second, or 50 gallons per minute.**

## Production Plan

**The building that will house the water bottling line will be larger than needed for our initial bottling production to allow for planned expansion. The dimensions we are designing will be 30 metres by 60 metres. This will comfortably accommodate two complete bottling lines, along with offices, lunch room, washrooms, and a shipping/receiving area with supply/production storage. There will be three wells drilled, designed for each to give a minimum of 40 gallons per minute supply. This will give assurance that our water supply is never an issue. These wells will be drilled well below where the groundwater starts. We plan to case each well down to where we are reaching a lower area of the aquifer. Thus, we will access water that is closer to 100 years old, allowing us a high degree of comfort that we will have negligible nitrate levels.**

**To start, the plant will operate with one bottling line for eight hours per day, five days a week. The production will be sized to produce an average of just under one container load per day, about 20,000 litres. This is 20 cubic metres per day. The bottling line will be sized to produce up to 80 bottles per minute. If demand is strong, which is expected, we can build to 40,000 litres per day with the one bottling line if we expand to two 8 hour shifts per day. To reach our planned maximum production we will add a second bottling line and size it to meet demand projections.**

**Heating and cooling requirements for the plant will be satisfied by using the water for bottling and passing it through a geothermal unit. The volume of water being bottled will easily produce the necessary amount to generate the required heating or cooling demands. The heat will distributed by an "in floor" heating system which will not take up valuable working space.**

# ***Pure Island Waters Ltd.***

## Water Consumption:

In year one the facility will require the equivalent of 10 households of water. This will increase in year 5 to the equivalent of 47 households which will be the maximum required. Over the five year period, Pure Island Water will monitor any detrimental effects to local well capacities and will rectify any negative results.

### Water Runoff:

There will be no water runoff as a result of Pure Island Water's production activity. Natural water runoff will be handled by ditches and sediment mitigation systems placed.

### Noise:

There will be minimum increase in noise accumulation for the area as all operations will take place within an insulated structure.

### Dust :

The amount of dust created from operations will be the result of traffic in and out of the operation. This will be greatly reduced by utilizing crushed asphalt on the travel areas. The crushed asphalt will be covered with hot-mix asphalt in years 4-5 further reducing/eliminating any dust.

### Traffic:

The amount of traffic in and out of the Pure Island Water facility will be minimal in years 1-3 comprising of employee and 4-5 transport trucks per week. In years 4-5 the transport truck traffic will increase to 8-10 per week.

### Facility Exhaust:

There will be minimal exhaust from Pure Island Water due to the utilization of geothermal and solar energy utilization. Minimal exhaust will occur during the winter months while using conventional means to heat the facility.

### Construction Phase:

During the construction phase, there will be heavy equipment utilized to remove the forest overburden, place suitable sub-base material for the working base and road access, construct the building, and additional finish work which may be required. All work will be done in accordance to PEI Public Works and Environmental requirements. Pure Island Water's goal will be to minimize the footprint of its facility.