

Oliver Stedman Government Center 4808 Tower Hill Road; Suite 116 Wakefield, RI 02879 401-783-3370

## **PUBLIC NOTICE**

| File Number: | 2013-04-057 | Date: | April 22, 2013 |  |
|--------------|-------------|-------|----------------|--|
|              |             |       |                |  |

This office has under consideration the application of:

Adam Silkes 65 Pierce Road North Kingstown, RI 02852

for a State of Rhode Island Assent to construct and maintain: a long line blue mussel farm of approximately 8.25 acres off of the west shore of Jamestown at the following coordinates:

41°31.007'N; 71°23.615'W

41° 30.999'N; 71° 23.646'W

41° 30.626'N; 71° 23.475'W

41° 30.635'N; 71° 23.443'W

A brief description provided by the applicant is attached. The entire file may be reviewed at the CRMC office in Wakefield.

| Project Location: | Narragansett Bay              |
|-------------------|-------------------------------|
| City/Town:        | Jamestown                     |
| Waterway:         | West Passage Narragansett Bay |

In accordance with the Administrative Procedures Act (Chapter 42-35 of the Rhode Island General Laws) you may request a hearing on this matter.

You are advised that if you have good reason to enter protests against the proposed work it is your privilege to do so. It is expected that objectors will review the application and plans thoroughly, visit site of proposed work if necessary, to familiarize themselves with the conditions and cite what law or laws, if any, would in their opinion be violated by the work proposed.

If you desire to protest, you must attend the scheduled hearing and give sworn testimony. A notice of the time and place of such hearing will be furnished you as soon as possible after receipt of your request for hearing. If you desire to request a hearing, to receive consideration, it should be in writing (with your correct mailing address, e-mail address and valid contact number) and be received at this office on or before May 22, 2013.

## Description

More than 85% of the US markets for premium live farmed mussels (>13,000 mt/year) are presently served by imports from Canadian suppliers (USDA 2004). The demand for blue mussels within the US is growing and Rhode Island is ideally situated within close proximity to many major markets.

During the Winter of 2011 I was issued a Commercial Viability Permit (CRMC File# A2011-12-027) for the purpose of experimenting with different methods of growing blue mussels (*Mytilus edulis*). I tried three different methods. The first using cotton bisected mesh socks developed in Atlantic Canada, the second method was a continuous grow rope system developed and refined in New Zealand and the last was a hybrid of both Canada and New Zealand styles that was developed in Iceland. I had varying success amongst the three styles, but mostly my yields upon harvest ranged between 3 to 5 pounds of marketable mussels per foot of grow out sock/rope. These numbers were encouraging as they are consistent with reported yields from around the world.

Given the success of my commercial viability experiment (CRMC File# A2011-12-027), I propose an 8.25 acre long-line Mussel farm involving 600 foot long main lines spaced fifty feet apart. The Farm will be located off the West side of Jamestown, North of Dutch Harbor. At full capacity, there will be 12 lines anchored at each end arranged in 3 different plots of 4 lines. A continuous system of seed mussel grow-out lines will be planted along the length of each line in a series of dropper loops. This is a proven method of Mussel Farming developed in New Zealand and practiced throughout the world. The design will potentially bring 198,000 pounds of mussels to market annually and will establish a niche in the market for a dependable, superior, domestic grown product.

The Canadian Province, Prince Edward Island (PEI) for example, produces approximately 16,000 mt/year (35 million pounds). There are 290 mussel producing sites encompassing almost 11,000 leased acres in PEI operated by about 120 mussel farmers. As of 2004, the PEI mussel farming industry had \$107 million in sales, contributed \$36 million in Gross Domestic Product and provided both direct and indirect employment for at least 1,500 people (622 full-time equivalents) (DFO 2006). In New Zealand, 970,000 mt (213,400,000 pounds) are produced annually worth \$215,000,000 US.

This proposed farm is tiny in comparison, but will create the awareness in the U.S. markets for domestically grown mussels and will help supply the increasing demand for mussels in the market place. It will also be a good stepping stone for myself to learn how to grow mussels efficiently in hopes of eventually attaining more growing space for this purpose. This will complement and enhance the efforts of local fishermen who are currently developing the technology to grow mussels in the offshore waters of Southern New England (see attached letter from Lindell).



My Commercial Viability line was in the water from the Spring of 2011 to June 2012. During that time there weren't any adverse interactions with recreation or commercial vessels, nor with any marine mammals.

## Operational Plan

As mentioned in the Description of this proposed site, at full capacity, there will be 12 lines that have 600 feet of grow-out space on them for the mussels. The entire lease will be 2400 feet long North to South. Each mainline, at either end, will be anchored with a minimum of 2 ½ to 1 scope anchor line. Within the 150 foot West to East boundaries, starting at one edge, I will secure 4 total lines spaced 50 feet apart. There will be 3 different plots of 4 lines with the middle plot sharing common anchors with the plots to the North and to the South. By spacing the lines 50 feet apart, commercial pot fisherman will be able to set gear within the lease between the lines. Traditional hook and line fishing is also compatible with the design. Also, this space has historically been zoned for Aquaculture, so user conflict is already at a minimum.

Also worth mentioning is that I've adhered to the recommendations of the CRMC Aquaculture Coordinator pertaining to concerns from fishermen and 'Save The Bay' at my Preliminary Determination.

The North and South anchors of each line will either be 4,000 pound concrete blocks or helix screw anchors depending on availability. A 50 to 100 foot length of one inch 3-strand poly steel rope will be attached to the anchors at both ends. These will attach to the 600 foot long mainline (also 1" poly). The mainline will be marked on the surface by floatation.

To compensate for the weight of the anchors as well as the product, sub-surface floatation will be required to keep the line from sinking to the bottom. The subsurface floats will be attached immediately to the mainline so as to remain at 5-6 feet from the surface. The number of floats necessary is a function of how fast the mussels grow and at what stage of growth they are at.

The purpose of the surface floats are to aid mariners/commercial fishermen as to the location of the line, but also as a visual reference for myself the farmer. If these floats are sinking, that tells me that the line itself is sinking and I need to add sub-surface floats to it before the line drops to the bottom. I will meet any marking requirements that are issued by the respected agencies (US Coast Guard, RIDEM, RICRMC). Visual impact will be minimal.

Seed will be planted from Spring to late Fall with harvest occurring throughout the same time frame. The seed will be procured from an existing shellfish farm in Narragansett Bay (see 'Mussel Seed Operations Plan' attached).

Farm maintenance will involve regularly checking the Farm to insure it is floating properly, cleaning excessive fouling on the gear (mainly the floats) and annual dives to check mooring systems. The floats need to be cleaned periodically, but this can be done easily with a brush.



The farm will be tended by a lobster style boat equipped with a mast and boom, hydraulic winches and grappling hook to bring the gear to the surface. The boat is retrofitted to tend long line aquaculture gear. All products that are grown and harvested at this farm will be sold to American Mussel Harvesters (AMH) in North Kingstown, RI.

## Mussel Seed Operation Plan

Mussel seed for this farm will be harvested from Salt Water Farms (SWF) in Narragansett Bay, RI. The seed sets naturally on the Farm gear hanging in the water column at SWF and will be transported by boat directly from SWF to the Mussel Farm or brought to American Mussel Harvesters (AMH) and then to the Mussel Farm.

Whether on the boat or inside the AMH shellfish facility, a grading and seeding operation will occur. It will be processed and graded by size then put into the cotton bisected mussel socks and/or continuous grow out ropes depending on seed size and time of year. These will be hung on the grow-out line designated by the issued permit.

The seed mussels will be tested for diseases and the required pathology reports will be submitted to the State before any seed is planted at the Farm.

| List of Waypoints for Route "Line/Shape Alarm Tue Apr 02 | r 02 2013 | 08:24" |
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| Name    | Latitude      | Longitude      |  |
|---------|---------------|----------------|--|
| Point 1 | 41° 31.007′ N | 071° 23.615′ W |  |
| Point 2 | 41° 30.999′ N | 071° 23.646′ W |  |
| Point 3 | 41° 30.626′ N | 071° 23.475′ W |  |
| Point 4 | 41° 30.635′ N | 071° 23.443′ W |  |

