Composting Operation Proposal

for the

Cochrane Pond Pasture Area

by

Mitchell Farms Inc.
Name of Undertaking: Peat and Poultry Manure Composting Operation near Cochrane Pond.

Proponent

(1) Name of Corporate Body:

Mitchell Farms Incorporated

(2) Mailing Address:

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(3) Chief Executive Officer:

Mr. Albert Mitchell
President
(709) 895-2330

(4) Principal Contact Person for purposes of environmental assessment:

Mr. Albert Mitchell
President
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The Undertaking:

(i) Nature of the undertaking

Over the past few years concerns over water quality and waste management have increased throughout Canada and in our own province. My proposal deals with helping to prevent a potential problem from occurring in the St. John’s area by utilizing broiler manure from the former IPL facility at Cochrane Pond.

(ii) Purpose/Rationale

The land resources that can handle this waste within the region are limited. Farm operations in the immediate area are do not have sufficient land base to handle the amount of waste being produced at the broiler facility. From discussions with agricultural staff and Mr. Ian Pittman with the ACC who operate the former IPL facility at Cochrane Pond it is apparent there is a need for a composting operation to assist in an disposing of the broiler litter being produced in an environmentally friendly way.

Description of the Undertaking:

Composting Site

The Cochrane Pond Pasture area is an excellent area for an agricultural
composting facility, there is no increase in environmental risk, no increased odor or noise problems. The proposed location is located within the St. John’s Agricultural Development Area and is in close proximity to the broiler facility. It is also our understanding the remaining portion of the Cochrane Pond Pasture will divided up into lots and offered to existing farm operations in the St. John’s area. We believe our operation will complement the other agricultural developments in the area.

The actually composting site will encompass a small portion of the lease approximately 5 or 6 acres. This area will be used as a site for the short term storage of peat and broiler manure, as a mixing area, and for the windrowing of mixed composting raw material. In addition to this compositing area the site takes in approximately 75 acres of drained peat bog which will be used in the production of the compost.

**The Raw Materials**

The only waste raw material we are going to use is the broiler manure from the ACC facility, we have no plans to compost any other type of material. The broiler manure will be incorporated with peat that will be harvested from peatland adjacent to the composting pad site. We will carry out any required maintenance work on the existing drainage system, rotavate and harvest the
peat in layers using vacuum technology. Harvesting peat by this method is more aesthetically acceptable than just digging the peat out and leaving an unsightly hole.

Peat moss not only produces a high quality compost but is an excellent amendment because of its characteristics for controlling odors and water absorption. Peat moss also helps maintain proper pH of the compost which is critical in the composting process.

**Composting Method**

The method we are going to use is known as windrow composting consists of placing a mixture of the raw materials in long windrows which are turned on regular basis. The of the windrows will be in the range of 4 -9 feet in hieght and range from 10 - 20 feet in width depending on the type of turning machine we decide to acquire. Windrow composting is the most common type associated with farm operations because you can use some of the existing equipment.

**Environmental Concerns**
We do not anticipate any significant impact on the environment. The site is more or less isolated from any residential, rural or cottage development. We will ensure that pad construction complies with separation distances required by the Department of Environment with respect to water courses (ponds and streams) and any requirements they may require to address possible problems with runoff or pile leachate. Proper management of the composting process is the simplest and most effective way to control nutrient and pathogen movement.

**Equipment**

Should this proposal go ahead we will have to acquire 1) a tractor assisted windrow turner 2) a tandem dump truck and 3) the rental/purchase of vacuum equipment. This equipment when added to our existing farm equipment should be adequate to operate the composting operation.

**Training and Staff**

We are planning to attend the Maine Composting School with the purpose of obtaining training in all aspects of the composting industry. Our primary focus will be on the utilization of agricultural waste and specifically broiler
manure.

We will be hiring up to 5 employees to work on this project. A supervisor who will look after the day to operation of the facility, monitor and manage the composing process and assign duties to the other staff who will operate the equipment and perform general laborer work. He will also be required to attend the composting course in Maine.

5 Year Development Plan

Year 1
 - Acquire lease and necessary permits
 - Training at the Maine Composting School
 - Construction of composting pad
 - Drain maintenance (if required)
 - Harvest and stock pile peat
 - Acquire 200 loads of broiler manure over the year and start the production of compost.

Year 2
 - Increase production utilizing 300 to 400 loads of broiler manure
 - Market study
Years 3-5 - Increase and maintain production utilizing 400 to 500 loads of broiler manure.

Approvals Required:

Approvals and any required permits for this project would come from the following Federal and Provincial departments and agencies:

- **Department of forest Resources & Agrifoods** - Agricultural Branch
  - Forestry Division

- **Department of Environment** - Environmental Assessment Division
  - Water Resources Division

- **Government services & Lands** - Land Management Division
  - Gov’t Service Centre

The City Of St. John’s

Department of Fisheries and Oceans

Department of Municipal Affairs - Urban and Rural Planning

Conclusion

We feel we can utilize 200 loads of product per year within our existing
business to upgrade the quality of some of my own landbase for forage development and also for sale to existing clients in the landscaping industry.

Any increase in the amount of production will be tied to market demand. There are opportunities to provide a product to the retail market as well as custom products for the horticultural industry. These opportunities will be looked at in year 2 or 3 of our plan.