REGISTRATION PURSUANT TO SECTION 49 OF THE ENVIROMENTAL PROTECTION ACT

NAME OF UNDERTAKING: CHAULK'S HERITAGE TURKEY FARM POULTRY ABATTOIR

PROPONENT:

(I) NAME OF CORPORATE BODY: CHAULK'S HERITAGE FARM INC.

(II) ADDRESS: GLOVERTOWN, NEWFOUNDLAND, A0G2L0

- (III) MRS. CINDY CHAULK OWNER/OPERATOR
 53 BAYVIEW HEIGHTS GLOVERTOWN, NL, A0G 2L0 709-424-0086
- (IV) CONTACTS: CINDY CHAULK
 53 BAYVIEW HEIGHTS
 GLOVERTOWN, NL, A0G 2L0
 709-424-0086

DATE: April 11, 2019

THE UNDERTAKING:

(I) Name of the Undertaking

Chaulk's Heritage Farm & Poultry Abattoir

(II)Purpose/Rationale/Need for the undertaking: The purpose of this registration is to add the turkey barn and the white meat abattoir to Chaulk's Heritage Farm previously to Glovertown Area Heritage Farm registration number 1895.

Being a newly established farm as well a new entrant to the agriculture industry I was recently awarded a parcel of land to commence such operations. Our lease agreement number is 149448 which was decreed to me on November 2.2017.

There is a growing demand for local product in our region, as well as a high demand for day old chicks (turkey poults, chicken poults, ducklings, as well as goslings) province wide. The demand is so great Chaulk's Heritage Turkey Farm & Poultry Abattoir is hoping to fill some of that demand in raising turkey pullets and processing it and selling to the consumers of NL as well as supplying day old poultry poults for the regular backyard hobbyist to fill their own need.

Since having my own hobby farm and growing all my own meats from beef, turkey, chicken, duck and goose you can see the value of providing food for family.

(III) Description of Undertaking

Geographical Location:

This land is in the municipal town of Glovertown, 15 km west on the highway from Glovertown, 57 km east of Gander, NL. This land is currently not being used. Please see Figure 1-5 below.



Figure 1. Location Map

Government of Newfoundland & Labrador **Department of Fisheries & Land Resources**





NOTE TO USERS

For majorines preserve control the Crown Lands Inguiries Line to setaphone at 1420-001-2018 or by 45848 if Orient Landshife Regional Lands Office: Will University Teaching and American Statement (Sectored Sectored Sectored) art inev



Scale 1:150,000 Complied on March 7 2019

Figure 2. Surrounding areas



Figure 3. Areas adjacent to farm



Figure 4. Total area of parcel of farm land . (Blue outlined area is where buildings will go.)



Figure 5. Building layout. Building 5 is slaughter house, building 4 is the turkey barn, the remaining buildings 3, 2, 1 were discussed in previous assessment. Cottage lot #151113 will be our residence and is not apart of the application.

The area that the buildings will take in will be a total of 4 hectares for building and a road for a turnaround for machinery, trucks and parking.



Figure 6

Land is presently clear of trees and majority of rock. This area was previously approved by crown land and the environmental division in accordance with Chaulk's Heritage Farm lot # 149448. Land was cleared in summer of 2018, by contractor with a excavator, he cleared the stumps and rocks of the land and made wind rolls with it to be taken away once the materials of stumps decomposes back into the ground. (Figure 7 below)





(V) Construction :

Construction of the hatchery, turkey barn, slaughter house and utility shed is proposed to commence in 2019. The buildings will consist of wooden structures with metal roof and siding and concrete foundations.

During the construction stage, minimal pollutants will be produced as only standard building supplies, tools and equipment will be used. All material waste will be taken to a provincially-approved disposal site.

The proposed hatchery, turkey barn, slaughter house and utility shed construction will take approximately 6 months to complete.

The turkey barn will provide ample space in the future to expand from 500 to 2500 turkeys over a five year period.

The white meat abattoir will allow on farm processing for our turkeys, ducks, geese, and chickens, the purpose of hatchery for the sale of day old chicks. The offal from the processing will be taken to Botwood Fur Ranch Inc. to feed their animals as a protein source to ensure that mink receive the highest quality feed for optimal health.

The utility shed was described in previously released assessment is used for parts and materials to be stored to be used on the farm like parts for tractor or tools for the land.

The hatchery was described in previously released assessment will house 3 incubators to hatch geese and duckling eggs to sell to general public as well as to raise some for processing for sell to restaurants, grocery stores and general public.

Feed shed was described in previously released assessment to store feed over winter months for animals.

We will also have an Actium composter on site to deal with any mortality and offal if necessary (Brief description of Actium composter below in Figure 8). The operation will be described in the operating section. Actium drum will be positioned out back of abattoir.(Please see appendix below)



Figure 8

Benefits of Composter

- No fuel needed to operate
- o Save labour
- Durable construction for a long service life.
- Rodents, scavengers, wild birds are not attracted to the disposal site
- Less truck traffic from fuel deliveries or dead stock removal
- Destroys disease causing pathogens
- Immediate disposal of dead stock.
- No burning fuel, creating smoke on the farm, or greenhouse gas in the air from incineration.
- Very little energy input from disposing of dead stock
- No wild animals around the farm.

Benefits on Onsite Composting

- Create compost at our farm
- o Decrease the Carbon Footprint
- o Control Flies and Odours
- Divert Organic Waste from Landfills
- Reduces Greenhouse gas Emissions
- o On Site Organic Waste Disposal Saves Money

Compost from the composter will be used on existing farm land or sold to the general public.

Construction of a turkey barn (40x150x12). The turkey barn will be a metal building to house the turkeys with a cement floor, with plywood quarter way up the metal with fans for air flow in the barn to help keep the air quality and temperature at ideal settings for the turkeys, feed lines and water lines to provide essential nutrients (feed and water) for the turkeys to aid in growth and development from a young poult to a finished turkey for market. The turkey poults will be purchased from Frey's Hatchery in Ontario, where they will be flown into Gander where we will pick them up. We will than raise these birds until they are ready to process which is 14-16 weeks. The barn will provide the ideal environment for raising turkeys.

The white meat abattoir (28x28x10) will be constructed of plywood and covered with metal siding. The interior walls will be covered with marlite, a washable surface for easy clean up after each processing day. The production flow for poultry which will consist of turkeys, duck, or geese and chickens will be an area for receiving poultry, they will be in approved crates and held in the animal area for processing, from there they will go to rendering-slaughtering, evisceration, cooling/washing, packaging, and holding/chilling, then sold to customers. Flooring will be cement. (Please see floor plan on next page for design below of abattoir Figure 10)



Figure 9

An artesian well will be drilled by Squires Water Well Drilling, they will come out and assess the area once the plans are in place for the buildings, so as to not have any contamination in or around the well and water.

Construction of all facilities will be done following all proper constructions codes and regulations for buildings.

All construction will be carried out through Home Hardware and they will sub contract the work out to electricians (noc7241), carpenters (noc 7271), labourers,(noc 7611), cement finishers (noc 7282). Newfoundland Light and Power will be contracted to install poles to supply electricity to the farm buildings.

(VI) Operations

Turkey farming operations proceed as follows:

The poults will be purchased from Frey's Hatchery in Ontario as day old poults (turkeys) and flown into by airplane to Gander where we will pick them up and raise them for 14-16 weeks of age than process them for the two market dates which will be Thanksgiving and Christmas.

Processing will occur in October and early December.

A hatchery building will be used only in the hatching months from April to mid-August. The hatchery will hold 3 incubators that can hatch 300 eggs at a time. The incubator will have the controlled heating in which to hatch the eggs, it has a automatic turner which turns the eggs every two hours stimulating what the mother would do. Hatching takes approximately 28 to 31 days to complete. The main purpose of the building is to hatch out goslings and ducklings for selling purposes of one day olds as well as raising some for processing in the abattoir to sell to restaurants ,grocery stores, and the general public. The shells from the hatchery will be crushed and added to the compost drum. (See appendix at bottom for reference to Atrium Drum Composter.)

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Poultry production will occur in the following order. Production Flow For Poultry-Custom Kill

- Living Animals
- Rendering
- Slaughtering
- Evisceration
- Cooling/Washing
- Packaging
- Holding/Chilling
- Customer Pick-up

Was on previous registration the feed shed will be built this room will hold sacks of feed for animals during winter months, feed will be raised of the floor to keep moisture from getting into sacks. Proper ventilation to keep feed dry is essential. Bio-security measures will be put in place to keep out wildlife, pest and insects.

There will be a family home close to the premises as to oversee all animals and buildings (CL application 151113) not part of the assessment application. There will also be bio-security measures in place on the farm to keep unwanted guests out.

Pollutants:

There are no bodies of water on the farm. The nearest neighbour is approximately 18 km away. Other than cabin lots 5 km away the nearest neighbour is 18 km away. Everything is contained in the buildings until disposal on fields.

Waste collection:

The manure from the barn will be applied to the fields for nutrients and crop production. The daily mortalities will be put in the Actium composting drum when the organic matter is all broke down this will also be applied to the land to add organic matter to the humus layer. Manure collected in the last growing season in December will be composted in the barn until spring for land application. Management of the pasture/fields will include rotational grazing and crop rotations.

Chaulk's heritage farm will be a family owned and operated by myself, with the help of family and friends, and future employees.

There will be a farm tractor on site for harvesting and conditioning the pasture lands. Along with all the attachments for processing hay for storage as not to mold or rot over the winter months. Hay will be wrapped in a plastic wrap to protect it from the elements and maintain its nutritional quality as forage for the livestock and will be stored outside on property.

Permits required:

- Crown land lease currently held by Chaulk's Heritage Farm are: 149448
- Environmental farm plan: Department of Fisheries and Land Resources
- Turkey farm operations; Department of Fisheries and Land Resources
- Valid pesticide applicators licenses; Department of Municipal Affairs and Environment.
- Commercial cutting permit; Department of Forestry and Land Resources
- o Pesticides applicator license; Department of Municipal Affairs and Environment
- o License for slaughter house- Government Service Centre
- Certificate of Approval
- Premise Identification (PID)

Funding:

- Canadian Agricultural Partnerships
 Provincial Agrifoods Assistance Program
 Farm Credit Canada
- Bank of Montreal



(519) 527-2525

info@actiumcomposting.com

Grande Continuous Composter

- 450 cubic foot volume.
- Dry weight of 8000 lb.
- Weekly mortality capacity of about 5000 lb.
- 1/4" mild steel drum 6 ft. diameter X 20 ft. long. Drive wheel ride on a rolled 7" channel, 12.25 lb. per ft.
- 1/4" mild steel paddles are bolted into the drum. They mix the composting material together and advances it to the discharge end. A scoop and scraper assembly welded into the discharge end empties material when the drum is rotated. The drum is rotated only while loading mortalities.
- The drum is wrapped with 1-1/2" of high density fiberglass board insulation which is sliced for insulating round tanks.
- 1-1/2" of high density Styrofoam insulation is in the ends.
- 5 ply aluminum jacket designed for insulated outdoor tanks to protect insulation. This material is non-corrosive. It is UV, puncture and moisture resistant. A high quality thermoplastic sealant is used at all edges.
- Stainless steel hopper and wheel guards
- Main frame supports are 8" C channel, 13.75 lb. per ft.
- Other frame components are laser cut and CNC formed. Material is 1/4" mild steel. -
- Frames are washed and coated with a Stainless Steel pigment coating system.
- 8-wheel friction drive with 2-1.5 hp. motors on double reduction gearboxes. Wheels are in a tandem arrangement. Each shaft is driven independently. Drum rotation speed is about 1 rpm.
- Drive wheels are 1-piece ductile iron with 5000 lb. capacity each. Surfaces are knurled for friction.
- Each pair of wheels are supported by 2 8000 lb. capacity pillow block bearings on a 1-15/16" cold rolled shaft.
- Couplings between wheels and gearbox are with ANSI 50 double chain couplers to allow for frame flexing without stress on the bearings. Chain couplers are protected by aluminum coupling covers
- Optional Hydraulically Actuated Hopper is available for loading large swine mortalities.





CompostDrum.com





(519) 525-2376

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like The Compost Drum

Grande Composter Operating Instructions

The Compost Drums from Actium Composting are designed to compost organic material. To do this, there are some simple parameters to be met.

Composting is the breaking down of organic matter by micro-organisms. To do this efficiently, the amount of carbon and nitrogen in the material should be balanced. The optimum C:N ratio is 30:1, but there is a fairly wide range that will work.

The moisture content of the material should be about 50%. Again, this is a guideline, and there is a big window of acceptable values.

Livestock mortalities are high in moisture and in nitrogen. So an amendment has to be added to decrease the moisture content and increase the C:N ratio.

In this document, "amendment" will refer to a dry material that is high in carbon. Examples are shredded cardboard, wood shavings, sawdust, wood shavings based poultry litter not heavily soiled, shredded paper, etc.

To start, place about 500 lb. of moist amendment into the drum. The material should be moist but not so wet that water can be squeezed out of it.

Addition of several 5 gallon pails of fertile soil on top of this will help inoculate the drum with beneficial micro organisms.

Add mortalities on top of this bed.

Adding more soil on top of the mortalities for the first few additions will help get the process started.

Cover the mortalities with an equal VOLUME of amendment. This is about 2 parts of mortality to 1 part of amendment by WEIGHT.

Do not turn the drum after addition of mortalities. The drum only needs to be turned if space is required for addition of mortalities and carbon. So the drum should only be turned before and during the addition of mortalities. Not after they have been added. In this way, the amendment covering the mortalities and in the hopper will provide some extra insulation and act as a bio-filter against odours. The fresh mortalities will then have a chance to heat up.

If eggs or other very wet material is being added, care must be taken to ensure sufficient amendment is used to get the moisture content down to about 50%. This would be equal WEIGHT of eggs and amendment. Experimentation will determine what this is by volume.

When compost starts coming out of the drum, this material can be used to replace up to 1/2 of the amendment. It should be put into the hopper before the fresh amendment.

Ideally, after the addition of birds and amendment, the hopper should be left full. Turning the drum before the addition of the next mortalities will draw this material into the drum.

CompostDrum.com

If you have any questions about the operation of The Compost Drum, please contact me.





All Dimensions in Inches