

Kettle Hill Farms Abattoir

# Waste Management Plan

Submitted By: Nelson Williams  
Revised: 11/16/2021

November 16, 2021

To whom this may concern,

Please accept this revised Waste Management Plan that has been prepared for the Kettle Hill Farms Abattoir, located on Route 80, Hopeall, Trinity Bay.

I am aware of the risk involved in such an undertaking and can ensure that all waste will be managed properly so the receiving environments are protected. A sound management plan has been developed that will allow us to properly dispose of waste by transporting offal generated to the Provincial Agricultural incinerator and using edible offal as animal feed. Attached are our Standard Operations Procedures that has been developed to date. There maybe updates to these SOPs once official training has been obtained from governing bodies. All training will be conducted prior to production of the abattoir.

Kettle Hill Farms Abattoir is committed to the management of its waste and improving its wastes practices where necessary. Thank you for your time and look forward to any comments or concerns that may arise.

Best Regards,

Nelson Williams

## **1.0 Background**

This Waste Management Plan has been developed for the Kettle Hill Farms Abattoir in Hopeall, Trinity Bay, NL. The construction and operation of this abattoir is a step forward in the self-sufficiency and food stability within our province. Being a fourth-generation farmer that farms and transports sheep, swine and beef cattle, I am fully aware and appreciate the need to have access to proper slaughtering and packaging facilities while protecting and minimizing waste to the environment.

My plan supports provincial livestock sector expansion and sustainability by; providing a facility that meets provincial standards and possibly federal in the future, contributes to the economic growth in our rural area and provides a quality product.

The undertaking will consist of a new build that will utilize an area of approximately 150 x 100 ft and will meet all standards within the Meat Inspection Regulations and Service NL. The site for the undertaking has access to electricity and to an artesian water source and has access route approximately 135m long.

## **2.0 Operation**

This facility will be made available to livestock producers within the province, with the added service of trailering livestock for custom butchering. This facility will produce, red, white meat along with swine. Based on demand an estimated number of animals to be processed a year will be 2050. Broken down this will be approximately

**250-300- Beef animals**

**1200-1500 Chicken/turkeys**

**250-300-Lambs/sheep/goats**

Based on this number the estimated volume of operational waste will be approximately 40 tons per year at max production. The approximate water use will be 91 000 gallons annually based on approximately 350 gallons per day 5 days a week. Personal garbage will include liquid or solid household waste that will be removed from site on a weekly basis by Eastern Waste Management. A limit of 6 garbage bags can be set out each collection day.

The operation of Kettle Hill farms abattoir will not generate waste from hazardous material such as fuel or oils. Equipment and utensils will be cleaned using accepted cleaning agents such as household dish soap and sterilization using household bleach. The septic system designed for the abattoir will handle this grey water.

Manure that will be generated from the operation of the abattoir will be minimal. Kettle Hill farms is estimating 30lbs of manure a week. This number can change depending on the frequency and type of animal being held in holding pens. Manure will be stored in a proper storage area near the abattoir. Manure will be stockpiled until spread on forage land.

This undertaking will be a permanent facility and will operate year-round. Below is a breakdown of the operational waste and how it will be managed.

Table.1 Waste Management during operation

Type of Waste	Method of Management
<p><b>Specified Risk Material (SRMs)*</b> (Skulls, brain, eyes, tonsils, spinal cord)</p>	<ul style="list-style-type: none"> <li>- Under the guidance and permits of the Canadian Food Inspection Agency, SRMs will be transported to the provincial agriculture incinerator located at Brookfield Road in St. John's, NL.</li> </ul>
<p><b>Non-Specified Risk Material (Non-SRMs)*</b> (Blood, bone, trimmings, hides)</p> <p><b>-Other animal offal</b></p>	<ul style="list-style-type: none"> <li>- Edible offal and blood will be transported to Viking Furs located in Cavendish, NL to be used as mink feed.</li> <li>- Unusable Offal will be transported to the provincial agriculture incinerator located at Brookfield Road in St. John's, NL.</li> <li>- Volume of animal hide can be reduced given market availability.</li> </ul>

<b>Black and grey waters</b>	- Approved septic system on site.
<b>Personal waste – daily household garbage:</b>	- Weekly garbage (Limit 6 Bags per week) removal by Eastern Waste Management.

\*In the future, the proponent will consider on-site burial of both SRM and non-SRM wastes at a suitable site as determined by an environmental consultant and approved by the Department of Environment and Climate Change.

Transportation of all offal including SRM, Non-SRM to the incinerator and edible offal destined for animal feed to the mink ranch will be the responsibility of trained employees of Kettle Hill Farms. Weekly garbage will be collected by Eastern Waste Management on a weekly basis.

SRM and Non-SRMs that will be transported to the provincial agriculture incinerator located at Brookfield Road in St. John's will be frozen and stored until enough volume has accumulated to transport a full load. Edible offal will be transported via sealed containers to the Viking Furs on a weekly basis or frozen until volume has accumulated to justify transportation. This frequency can increase or decrease based on production. In the event normal disposal of edible offal to Viking Furs is disrupted, the offal will also be frozen and transported to the agriculture incinerator.

### **3.0. Environmental Factors**

The location of the undertaking is bounded by a Transmission Line and is adjacent to a previously constructed barn that is approximately 140x30ft on established pasture land that is used for farming and the growing of forage. Currently the already constructed barn houses: 20 beef cattle and 50 breeding ewes. This undertaking will only be utilizing the leased land (Lease # 37381) for the foreseeable future. There are no physical and biological environments within this area that potentially could be affected by the project. The parcel of land that the undertaking would be located on consist of rough terrain, minimal trees, no bodies of water. The nearest body of water is approximately 420m adjacent to the undertaking. This body of water is not a water source for residential or public dwellings. The nearest residence which is also within the nearest community of Hopeall is approximately 983m. Stillwater RV Park is approximately 421m on the opposite side of the road of the undertaking. The surrounding

land does not exhibit any other social environments such as cabins or hiking trails. As per the Meat Inspection regulation regarding location of an abattoir, this undertaking does exceed the reasonable offset of 100m (330ft) minimum. While composting is the desired method of offal disposal, this is currently not Kettle Hill Farms Plan. In the future, on-site burial of both SRM and non-SRM wastes will be considered.

Blood and edible offal collected from processing will be transported to Viking Furs for mink feed. An approval has been given for the construction and installation of a sewage system/water supply to service the undertaking.

During operations offal such as blood, bone, animal trimmings effluent due to processing, solid waste materials such as Specified Risk Materials (SRMs) and non-Specified Risk Materials (non-SRMs) will be transported to another farm for animal feed or transported to the provincial agriculture incinerator. Proper training will be conducted by Federal and Provincial Government officials that will come onsite to train how to properly separate, collect, dispose and transport waste from the slaughtering processes. This training will be conducted prior to operation. SRMs will be collected and stored in designated containers which will be sealed, properly labelled and frozen until ready to transport to the incinerator. The equipment that handles SRM will be designated and not used for any other purpose within the operation. Conveyances used to transport SRM will be clearly identified and only used for that purpose. Kettle Hill Farms will need to record data such as dates, times and weights. Every time SRM is transported, SRMs are clearly identified and the vehicle transporting SRMs must have a "Spill Kit" aboard in the event there is a spill. Only trained personal will handle SRMs. A special permit from Canadian Food Inspection Agency (CFIA) will be issued to allow transport along with proper Standard Operating Procedures (SOPs) for handling and transportation of SRM. Permits will be obtained prior to initial transportation. All activity regarding SRM control will be logged and kept on file for minimum 10 years. This process is highly regulated by Federal Inspectors with Canadian Food Inspection Agency auditing the documents quarterly.

Offal that is generated from this operation will be stored in containers of suitable metal, plastic or fiber glass leak-proof construction and covered with insect-proof covers of the same construction; marked to identify how it is being used and not used for any other purpose; kept clean and in good repair; kept in the storage room or isolated area provided for that purpose and emptied on a frequency that meets requirements. There will also be weekly

garbage pickup for all other personal garbage etc. and a regulated pest control plan to eliminate any nuisance pest. Manure that will be generated from the livestock being housed will be stored as per regulation in a designated area, greater than 30m from any bodies of water and an appropriate distance from the artesian well.

In the event there is a fuel leak from a transport vehicle, farm tractor or any other machinery on the site of the abattoir, absorbent will be made available onsite. Trained employee will cover the area with absorbent material, allow to absorb for 20+ minutes and then disposed of in proper disposal receptacle. The operation of the abattoir does not require large volumes of fuels or oils therefore minimizing the risk of environmental contamination from these hazardous wastes. Emergency contacts such as 911, Environmental officers, Animal Health Inspectors, Service NL Inspectors will be made available to all employees of Kettle Hill Farms.

#### **4.0 Conclusion**

Kettle Hill Farms abattoir is committed to ensuring every effort is made to implement a Waste Management Plan that is effective for the operation of the abattoir but also protects the receiving environments of the waste generated from the processes. We are driven to take advantage of all initiatives, training or practices that allows us to maintain an environmentally sound operation.

## SOP 1

### Transporting & Handling Specified Risk Material (SRM)

1. SRM are defined as:

- the skull, brain, trigeminal ganglia (nerves attached to the brain), eyes, tonsils, spinal cord and dorsal root ganglia (nerves attached to the spinal cord) of cattle aged 30 months or older; and
- the distal ileum (portion of the small intestine) of cattle of all ages.

2. SRM will be separated during production by trained personnel and will be stored in dedicated/marked containers.

3. A permit will be issued prior to any transportation of SRMs from the Canadian Food Inspection Agency and must accompany all shipments of SRMs. A permit is required to transport: cattle deadstock containing SRM; raw, rendered or composted SRM; and edible beef carcasses which still contain SRM. Permits will be issued annually for commercial operations that transport deadstock or SRM at a frequency of at least once per week. For operations that transport SRM on a less frequent basis, a permit may be issued and may be valid for a shorter period of time. Applications for an annual SRM transportation permit, Kettle Hill Farms would contact the nearest CFIA district office.

4. All SRM must be identified as follows:

- Raw SRM from abattoir must be dyed and packaged in dedicated, labelled containers;
- Deadstock cattle must be marked with a visible stripe down their back; and
- Edible whole or partial carcasses of cattle aged 30 months or older containing the dorsal root ganglia must be marked with a meat marking dye along the vertebral column.

5. Trucks or trailers that carry SRM must be cleaned and disinfected between loads by trained personnel. SRM-dedicated trucks or trailers do not require special clean out procedures between loads. Dedicated trucks and trailers must be clearly marked on the outside with "SRM".

6. While on the road, drivers are to be observant of any spillage or leaks. If spillage or leaks are observed, driver must stop and take appropriate corrective action to stop and clean up the leak. *Please refer to SOP #2 for SRM Spill procedure.*



## **SOP 1**

### **Transporting Specified Risk Material (SRM)**

#### **Cont.**

7. Stops should be minimized by the driver and avoided when possible due to the high risk associated with transported SRM. In the event the driver must stop they should:

- Park as far away as possible from live animal transport units
- Avoid parking on gravel or loose surfaces; park on hard surface that can be decontaminated if leakage of fluid occurs.

8. When accessing the unloading site, the driver must follow any biosecurity requirements in the place at the site. If the driver needs to get out of the transport unit it is recommended that they wear: Footwear that can easily be cleaned and disinfected and an outer layer that can be taken off before re-entering the transport unit.

8. Records of all SRM and deadstock movement must be kept for 10 years. This information must identify:

- the name and address of the transporter;
- the date of movement;
- the name of the dye used;
- the identification number of approved tags;
- the combined weight of SRM and carcasses considered SRM, as well as the number of carcasses; and
- the destination.

## SOP 2

### SRM Spill Procedure

1. If there is leakage/spillage during loading or transporting all actions must be stopped and the proper corrective action be implemented.
2. The transport unit and abattoir will contain a "Spill Kit" that will include:
  - Personal protective Equipment (PPE) ex: disposal coverall, eye protection, footwear, gloves
  - Absorbent material (absorbent clay, fine sand, sawdust, disinfectant and disinfectant sprayer
  - Shovel and broom
  - Disposal Bags
  - Duct tape
  - A list of emergency contact information in the event of a large spill
3. The Spill kit will be stored in a container with a lid and its contents be checked regularly to endure adequate supplies and expiration dates for the kits components.
4. If there is leakage/spillage during loading or transport it will be the drivers or trained personnel responsibility to engage in the cleanup.  
Trained personnel/Driver of transport unit will dress in the PPE provided in the spill kit either on site or in the transport unit.

*\*\* SOP will be finalized when official CFIA training is given to employees of Kettle Hill Farms. Proper training is a requirement from the CFIA and will be obtained prior to any transport of SRM.*

### **SOP 3**

#### **Garbage Removal from Operation**

1. Garbage and recycling receptacles will be emptied daily or when there is production by trained personnel.
2. Garbage receptacles on production floor, in washroom and lunch room must be inspected daily or when there is production and kept in sanitary conditions.
3. Outside grounds will be kept clean and in a tidy condition to eliminate any risk of contamination and will be monitored on a continuous basis by designate.
4. Garbage will be contained in household garbage bags inside of a designated sealed container until weekly pick up by third party contractor, Eastern Waste Management.
5. Maximum of 6 bags of household garbage in regular 66cmx 82.5cm bags per pick up day is allowed.
6. Each bag must not weigh no more than 20kg/45lbs
7. Recycling receptacles for paper/cardboards, plastic bottles, aluminum cans will be made available throughout the facility to minimize the amount of garbage generated by the production for the abattoir.

## **SOP 4**

### **Handling & Storage of Manure**

1. Manure will be collected from the holding pens to storage location on a daily or frequency that is suited for the production by trained personnel.
2. Shovels or front-loading units will be used to shovel manure to transfer vehicle.
3. Manure will be transferred to storage location, located near the abattoir.
4. Manure will be stockpiled in approved location until able to spread on forage land.
5. The application of manure will not be permitted on frozen ground.

## **SOP 5**

### **Handling & Transportation of Non-SRMS and other offal.**

1. All offal that will be used for animal feed such as bone, blood and trimmings will separated during production my trained personnel and stored in marked containers.
2. Offal will be stored in sealed/leak proof containers and frozen until enough volume has accumulated for transport.
3. Employees of Kettle Hill Farms will be responsible for the transportation of offal destined for animal feed to Viking Furs.
4. Volumes of non SRMS and other offal will be recorded by employees of Kettle Hill Farms and kept on record.
5. Offal that is being transported for animal feed will be carefully loaded to transport unit in leak proof containers by trained personnel.
6. Offal that is not going for animal feed such as hides, feathers will be combined with SRM offal and transported to the provincial incinerator.
7. If there is a spill of non SRM offal during the loading stage or transport, trained employees will immediately follow *SOP 6 Clean up of Non -SRM spills.*

## SOP 6

### Clean up of Non-SRM Spills

1. Clean up of Non-SRMs will occur every time there is a spill by trained personnel.
2. During loading or transport employees will use the proper tools such as shovels and rakes used ONLY for Non-SRMS and remove larger material from area.
3. Absorbent material such as sawdust will be used to cover the area. Once the liquids have been absorbed, employee will shovel remaining spill into another disposal container different than container with offal being utilized for animal feed. This material can be disposed of in the same container as SRMS that are being transported to the incinerator
4. If the area can be hosed down, employee should hose down the area to prevent any flies or pest.

## SOP 7

### Hazard Waste Spill Procedure

1. Hazardous Material will be handled as per their Safety Data Sheets which will be kept on file on the property of the abattoir. All employees that would be handling hazardous material will have proper training.
2. In the event of a Hazard Waste spill such as oils and leaks, trained personnel will absorb the surface with sawdust or kitty litter. Wait for the spill to be absorbed. This could take up to 2-12 hours depending on the volume of the spill.
3. Using tools that are designated for Hazard Waste Spills such as shovels and rakes spill and absorbent will be cleaned up and disposed of in an air tight container. **DO NOT PLACE IT IN REGULAR GARABGE.** *Refer to SOP 8 Disposal of Hazardous Waste.*
4. Add water and dish soap to the spill stain and scrub with a brush if necessary.
5. Blot up oil and soap residue using old clothes or paper towels. Place clothes or paper towels in air tight container for disposal as hazardous waste. **PLACE IT IN REGULAR GARABGE.**
6. Repeat above steps, if necessary

## SOP 8

### Disposal of Hazardous Waste

1. Disposal of Hazardous waste will as per their individual Safety Data Sheets. Only trained personnel will handle the disposal of hazardous waste. In the event there are no trained personnel on site, emergency contacts will be posted onsite of the abattoir.
2. Spills of hazardous waste such as fuels or oils will be clean up by trained personnel immediately as per *SOP 7 Hazardous Waste Spills Procedure*.
3. Spill cleanup materials **WILL NOT BE PLACED IN REGULAR HOUSEHOLD GARBAGE.**
4. Hazardous waste and clean up materials such as absorbent and paper towels if used will be placed in labelled air tight container.
5. Air tight container will be transported to an Eastern Waste Management Site in Robin Hood Bay, NL.