

# Omiachi Farm Abattoir

## Waste

# Management Plan

EA Registration Number – EA2222  
Submitted By: Jonathan Omiachi  
Dated: February22, 2023

To whom this may concern,

Please accept this Waste Management Plan that has been prepared for the Omiachi Farms Abattoir, located at 470 Swansea Road, Victoria, Conception Bay, NL.

I am aware of the risk involved in such an undertaking and can ensure that all waste will be managed properly so all the environment and human potential impacts are respected within the governmental guidelines.

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. This is a living document that will be revised, as needed.

Omiachi 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,

Jonathan Omiachi

## **1.0 Background**

This Waste Management Plan has been developed for the Omiachi Farms Abattoir in Victoria, Conception Bay, NL. The construction and operation of this abattoir is a step forward in the self-sufficiency and food stability within our province. There is a need for local meat products that are of a high quality.

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. This plan includes and respects all the aspects of a proper slaughtering and packaging facility while protecting and minimizing waste to the environment.

The undertaking will consist of a new build that will utilize an area of approximately, 20x20 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.

## **2.0 Operation**

This facility will produce red meat along with swine. Based on demand an estimated number of animals to be processed a year will be 190. Broken down this will be approximately:

100- Beef animals

90-Lambs/sheep/goats

SRM 1,900lbs annually

Non SRM waste 40,100lbs annually

Note: figures based on an estimated yearly harvest of 100 cattle, 30 lambs and up to 60 goats.

Based on this number, the estimated volume of operational waste is outlined in Section 4.0 of this document.

The water source is from an artesian well on the property. The approximate water use will be 5,200 gallons annually based on approximately 200Gal per day 5 days a week. There is also a

septic system on the property that can accommodate 300-400Gal per day which is significantly more than will be needed.

The operation of Omiachi Farm 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 will be stored in a proper storage area near the abattoir. Manure will be stockpiled as compost 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.

**It should be noted that all offal will be composted on site. Should there be a rare instance where composting is not possible at a specific time, all offal will be transported to the Brookfield Rd site in St. John's.**

**Table 1 - Waste Management during operation**

Type of Waste	Method of Management
Specified Risk Material (Skulls, brain, eyes, tonsils, spinal cord)	Under the guidance and permits of the Canadian Food Inspection Agency, SRMs will be composted. Should composting not be an option at the time, all SRM will be transported to the provincial agriculture incinerator located at Brookfield Road, St. John's, NL.

<p>Non-Specified Risk Material</p> <p>(Blood, bone, trimmings,- hides)</p> <p>-Other animal offal</p>	<p>Edible offal will be used to produce blood pudding and human consumption.</p> <p>Unusable Offal will be composted. Should composting not be an option at any point in time, all waste will be transported to the provincial agriculture incinerator located at Brookfield Rd., St. John's, NL.</p> <p>Volume of animal hide can be reduced given market availability.</p>
<p>Black and grey waters</p>	<p>Approved septic system on site.</p>
<p>Personal waste — daily household garbage.</p>	<p>Weekly garbage (Limit 6 Bags per week) removal by Eastern Waste Management.</p>

Transportation of all offal including SRM, Non-SRM to the compost pad will be the responsibility of trained employees of Omiachi Farms. Should composting not be an available at anytime, all offal will be transported to the incinerator on Blackmarsh Rd., St. John's. Weekly garbage will be collected by Eastern Waste Management.

Transporting offal to St. John's will only be used as a back-up plan should there ever be an issue related to the composting. SRM 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.

2.1 The chart below indicates the distance between the various entities on the property.

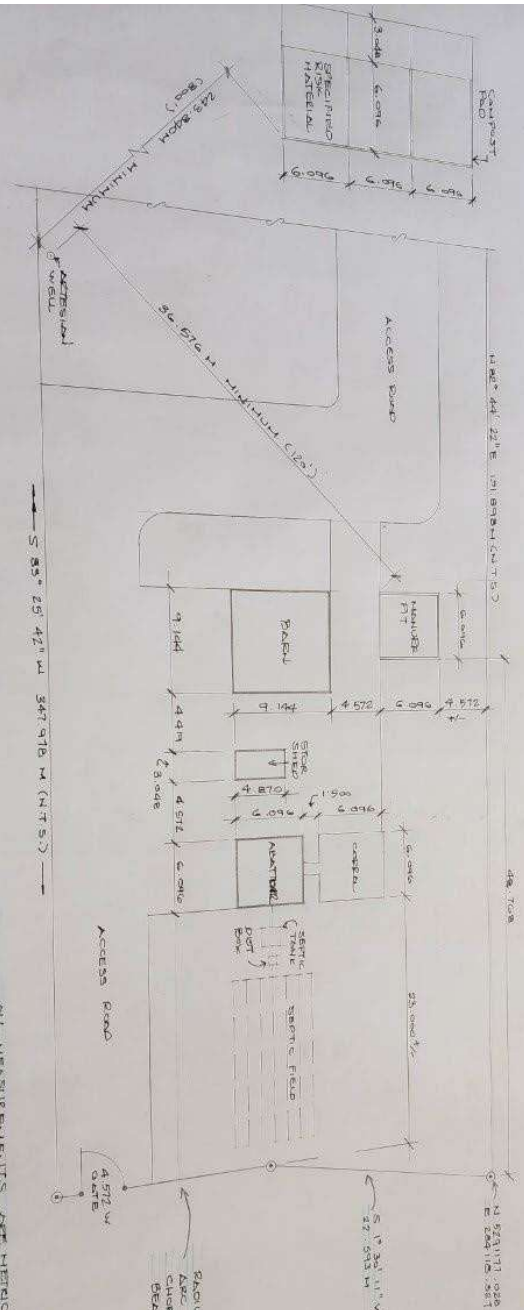
<b>Item</b>	<b>Distance From</b>	
Septic Field	Building	23 meters
Compost Pad	Water supply	244 meters
SRM	Water supply	244 meters
Water supply	Manure pad	37 meters
Manure pad	Barn	4.5 meters
Manure pad	Property boundary	6 meters
Manure pad	Nearest Residents	610 plus meters
Manure pad	Compost pad	225 meters
Manure pad	Nearest of body of water	305 meters
Manure pit	Water supply	36.5 meters
Barn	Storage Building	4.419 meters
Barn	Nearest Residents	605 meters
Pasture	Nearest Residents	1010 meters
Storage Building	Abattoir	5.512 meters

Abattoir	End of septic field	23 meters
Abattoir end	Boundary of leased land	17.184 meters
Abattoir	Nearest Residence	595 meters

ENLARGED SITE PLAN  
SCALE 1:150

ALL MEASUREMENTS ARE METRIC  
(CHECKED BY S. B. H. S. H. S. H.)

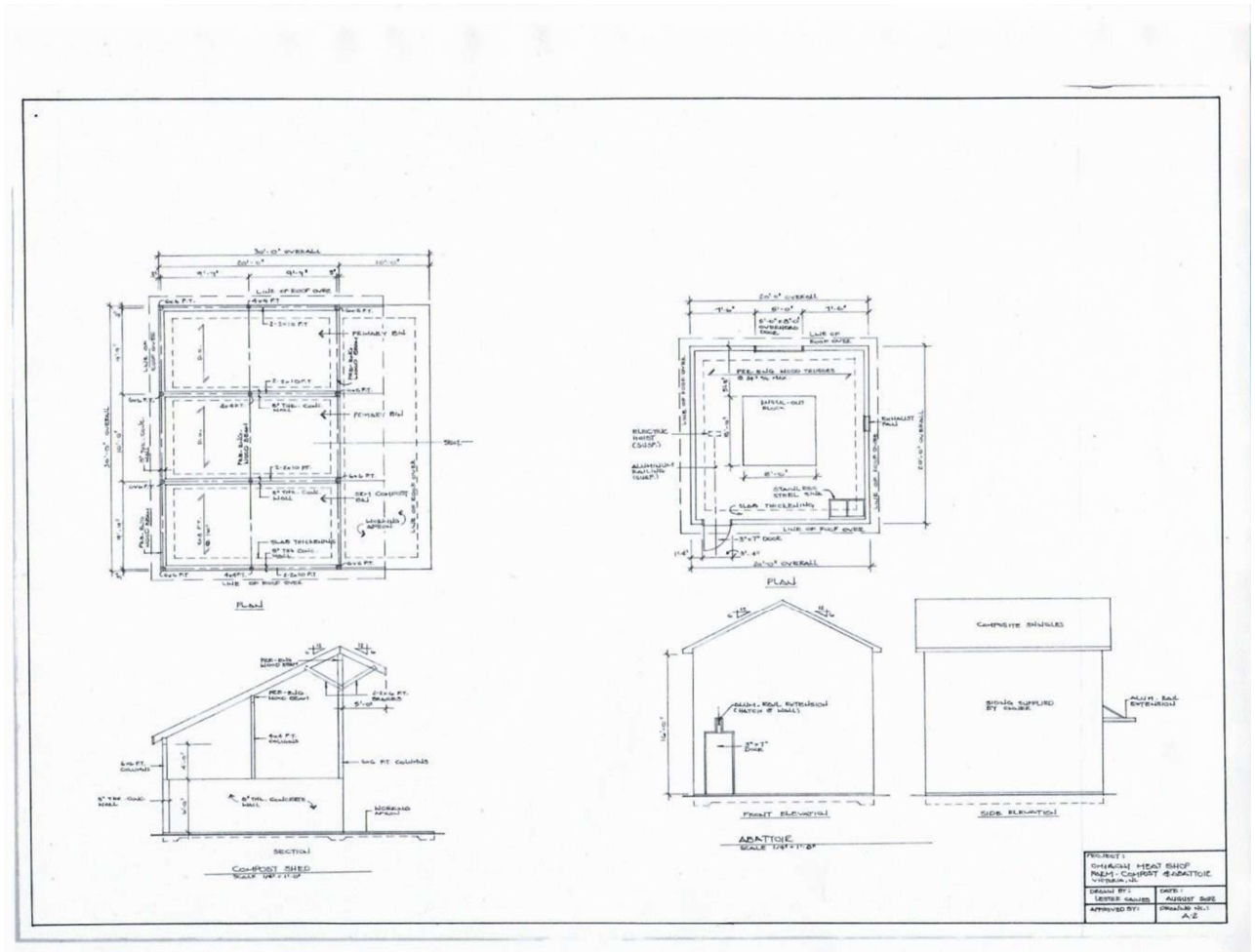
SKOUS - 31.228 m  
ABC - 14.421 m  
CHECKED BY S. B. H. S. H. S. H.  
DATE: 15/04/2018





The compost pad will measure 60' with each compartment measuring 20'.

The manure pad will be 20x20' and situated behind the barn and 15' away from the barn. All manure will be taken from the barn daily and stockpiled until it's ready to be used on the field as fertilizer.



### 3.0 Specific Guidelines Followed

The composting of abattoir offal, animal mortalities and butcher waste is common practice in the livestock and related industries throughout North America. Composting is often the choice for waste disposal for farms, abattoirs and butcher shops because it is cost effective and has a low environmental risk, when done properly. The result of the process is that the waste is disposed of in a safe, environmentally friendly manner and as a bonus, the resulting compost is a great soil amendment and an excellent source of fertilizer. It is high in nitrogen, phosphorous, potassium and micronutrients. The compost is safe to use for forage production and potentially for many other crops.

Waste generated from the proposed facility, which will involve processing of 100 beef animals, 30 lambs and 60 goats on an annual basis. The offal will be composted as per Environmental Standards for Compost Facilities Guidance Document (GD-PPD-048.6).

The Omiachi Abattoir proposed that it would dispose of the Non-SRM and SRM waste by composting it. According to the Cornell Waste Management Institute, it typically takes approximately 15 yards of carbon (sawdust) to compost 1 Imperial ton or 16.5 yards per Metric Tonne of offal. Supply of sawdust does not seem to be an issue at this time, however, if supply becomes an issue, the finished compost or another carbon sources can be used in building of the new piles. Sources for carbon, such as shredded cardboard, waste hay, waste silage, manure pack, wood chips, peat, etc. have also proven to be acceptable.

#### **4.0 Specifics Relating to Waste**

##### **Offal Breakdown**

Each animal slaughtered will have approximately the following amount of offal:

##### 1.0 Under 30-month old cattle (UTM)

Non SRM Compostable (Hide, Gut, Feet, Head, etc.) – 370 lbs.

Blood Collected and utilized (15 liters per cow) - 35 lbs.

Animal feed (lungs, trim, etc) - 15 lbs.

Usable for Human Consumption (Kidney, Liver, etc.) - 25 lbs.

SRM (Distial Ilium) - 10 lbs.

Total Weight: - 455 lbs.

##### 2.0 Over 30-month cattle (OTM)

Non SRM Compostable (Hide, Gut, Feet, Head, etc.) – 280 lbs.

Blood Collected and Utilized (15 liters per cow) - 35 lbs.

Animal feed (lungs, trim, etc) - 15 lbs.

Usable for Human Consumption (Kidney, Liver, etc.) - 25 lbs.

SRM (Spine, Head, Distal Ilium, etc.) - 100 lbs.

Total Weight: - 455 lbs.

### 3.0 Lambs and Kids

Compostable material (Hides, Blood, Gut, etc.) - 50 lbs.

Animal feed (lungs, trim, etc.) - 5 lbs.

Usable for Human Consumption (Kidney, Liver, etc.) - 5 lbs.

Total Weight: - 60 lbs.

### Calculations

Total Non SRM Offal to be composted:

4.0 100 Cattle (assume 10 % OPTM and 90 % UTM)

90 UTM Animals (370 lbs. per animal) - 33,300 lbs.

10 OTM Animals (280 lbs. per animal) - 2,800 lbs.

5.0 30 lambs (50 lbs. per animal) - 1,500 lbs.

50 kids (50 lbs. per Animal) - 2,500 lbs.

Total Compostable Weight: - 40,100 lbs. or 20.05 tons or 18.23 MT

Sawdust required = 15 cubic yards per ton of Offal

For Non-SRM Offal = 15 cu. Yds. /ton X 20.05 tons = 300.75 cu. yds. Sawdust

Sawdust Weight

1 cu. Yd. sawdust weight 241 Kg. or 530.2 lbs.

Total Weight of Sawdust = 300.75 cu. Yds. X 530.2 lbs. /cu. yd. = 159,457.65 lbs. or 72,480.75 kg

### **Total SRM Offal to be composted:**

90 UTM Cattle (10 lb. per animal) - 900 lbs.

10 OTM Cattle (100 lbs. per animal) - 1,000 lbs.

Total Compostable Weight: - 1,900 lbs. or 0.95 tons or 086 MT

Sawdust required = 15 cubic yards per ton of Offal

For SRM Offal = 15 cu. Yds. /ton X 0.95 tons = 14.25 cu. yds. Sawdust

Sawdust Weight

1 cu. Yd. sawdust weight 241 Kg. or 530.2 lbs.

Total Weight of Sawdust = 14.25 cu. Yds. X 530.2 lbs. /cu. yd. = 7,555.35 lbs. or 3,434.25 kg

Total Weight of Feedstock

= Weight Non-SRM Offal + Weight SRM Offal + Weight Non-SRM Sawdust + Weight SRM Sawdust

= 40,100.00 lbs. + 1,900.00 lbs. + 159,457.65 lbs. + 7,555.35 lbs.

= 209,013.00 lbs. or 95.00 MT

**Summary:**

*Composted Offal*

Non-SRM Compost Total Feedstock: 90.70 MT

SRM Compost Total Feedstock: 4.30 MT

Total Compost Feedstock: 95.00 MT

*Non-Composted offal*

Blood Volume/Weight 1,575.00 kg or 1,500 liters

Total Consumable Offal (Cattle) 1,136.36 kg

Total Consumable Offal (Lambs and Kids) 181.82 kg

Total Animal Feed Offal (Cattle) 681.82 kg

Total Animal feed Offal (lambs and Kids) 181.82 kg

Total Non-Composted Offal: 3,756.82 kg

### **Manure Volume Current**

4 Cattle for 6 months 137.13 Cu Meters

17 Goats for 6 months 50.60 Cu Meters

1 Lama for 6 Months 14.50 Cu Meters

Total Current Manure 202.23 Cu Meters

Total Manure when at Full Production

40 Cattle for 6 Months 1,371.27 Cu Meters

15 Sheep for 6 Months 36.23 Cu Meters

30 Lambs for 6 Months 20.64 Cu Meters

25 Goats + Kids for 6 Months 37.21 Cu Meters

Total Manure When at Full Production 1,465.35 Cu Meters

### **5.0 Separation of Abattoir Waste:**

At the Omiachi Abattoir, the solid waste will be separated into two groups:

1) Specific Risk Materials (SRM's) Offal – These will be separated, collected in bins and stored on site prior to transport to a designated location on the farm where it will be composted.

2) Non-SRM Offal – The Non-SRM material will be collected and stored on site prior to transport to a designated area on the farm where it will be composted.

Composting Process:

The Omiachi Abattoir will compost its offal in a building with 3 bins. The SRM and Non SRM offal will be composted separately using the process outlined below.

Non SRM Offal Composting Process:

The structure where the offal is composted will have 3 bins within it. These will be 2 primary bins and 1 bin used for SRM. Composting of the Non-SRM offal will be carried out using the following process:

- 1) A layer of sawdust or course wood chips 60 cm (24") deep by be laid out across the bottom of one of the primary bins.
- 2) A layer of offal 30 – 37.5 cm (12-15") deep will be spread on top of the sawdust. The offal should not be placed less than 30 cm (12") from edge of the bin.
- 3) Cover offal with a layer of sawdust/wood chips 30-45 cm (12-18") deep as soon as possible on the same day.
- 4) Add a second layer of offal in the same manner as the first and cover this with a layer of sawdust/wood chips 30-45 cm (12-18") deep as soon as possible on the same day. Repeat this process until the bin is full.
- 5) The final layer of sawdust should measure 60 cm (24") deep to prevent any odors from being emitted. The bin should reach a temperature of 40-65C at this stage.
- 6) After filling the first primary bin repeat steps 1 through 5 in the second primary bin. This bin will be filled while the first bin composts.
- 7) Once the first primary bin has reached a temperature of 40C for seven (7) consecutive days and then begins to drop the pile is ready to be moved to the secondary bin. At this point the pile should contain bones and minimal soft tissue. This should take approximately 3 months.
- 8) Once the composting process is complete in the first primary bin, or the second primary bin is close to being filled, transfer the material to a curing pad outside the structure turning and mixing it in the process.
- 9) At this point the second primary bin should be filled and going through the initial composting process. The recently emptied first primary bin can be filled again using the first 5 steps of the process.
- 10) The compost on the curing pad will take approximately three (3) months to finish composting. Monitor the pile regularly, when the pile has reached a temperature of greater than 55C for more than 7 days and than drops, it has most likely finished composting. Check the pile to ensure there are no signs of soft tissue left. If there are no signs of soft tissue, the pad can be emptied and the compost stored on another pad outside the structure or spread on the fields as manure. Large bones should be separated from the pile prior to spreading. The bones can be used for the base of new piles to aid in aeration.
- 11) The process above will be repeated as more offal is produced.

#### Composting SRM Offal:

SRM or Specific Risk Material offal, must be separated from the other offal when processing cattle. If the SRM is not separated from the offal than all the offal will be

considered SRM. The compost produced during the SRM Process must be kept separate from the Non-SRM compost. Also, any tools or equipment that comes in contact the SRM compost must be cleaned and sanitized thoroughly prior to being used on the Non-SRM compost. The compost process will take place in bins located in the third within the compost building, sized to fit the volume of offal produced. As the compost process will take 6 years to complete, there will be 6 bins, each containing one year of compost.

The composting process will be carried out as follows:

- 1) A layer of sawdust or coarse wood chips 60 cm (24") deep by be laid out across the bottom of one of the bins.
- 2) A layer of offal 30 – 37.5 cm (12-15") deep will be spread on top of the sawdust. The offal should not be placed less than 30 cm (12") from edge of the bin.
- 3) Cover offal with a layer of sawdust/wood chips 30-45 cm (12-18") deep as soon as possible on the same day.
- 4) Add a second layer of offal in the same manner as the first and cover this with a layer of sawdust/wood chips 30-45 cm (12-18") deep as soon as possible on the same day. Repeat this process until the bin is full.
- 5) The final layer of sawdust should measure 60 cm (24") deep to prevent any odors from being emitted.
- 6) The bin should be sized to contain 12 months production of SRM offal. At this point a second bin will start to receive offal.
- 7) Once the bin is full it will be left to compost for 6 years. At the 6-year mark, the bin will be emptied and it will receive new offal. The offal in the bin will be used or disposed of as indicated below under supervision of the CFIA.

Notes:

- If any liquid seeps out of the pile, scrape it up and put back in the pile.
- Residuals must be well covered to ensure that odors are reduced, heat is trapped in the pile and vermin/unwanted animals are not attracted to the windrow.
- The pile should not be turned too early as this can release odors and attract vermin if the offal is not sufficiently broken down. Generally, a pile can be turned after 3 months. Turning will speed up the compost process. Timing of the first turning may vary as composting times may be affected by things such as air temperature.

Monitoring the Piles:

The following actions will be taken to monitor the piles to ensure that they are composting correctly:

- 1) The temperature will be checked at each visit with a minimum of 2 visits weekly. After three (3) days the pile should have reached a temperature of 49-77C (120-170F) which will cook and decompose the offal as well as reduce harmful pathogens in the pile.
- 2) A log that records of the weight of offal added to the pile, temperature of the pile, any odor, presence of leachate, presence of scavengers and any unexpected event that occurs will be filled out at each visit. This allows the operator to ensure that sufficient temperature has been reached, acts as a record to deal with any complaints that arise and assists in making adjustments to the process, if necessary. These logs will be kept with the Omachi's Abattoir records.
- 3) Monitoring the pile temperature regularly is essential to ensuring that the compost process is happening correctly. Temperature is an indicator of the rate of decomposition within the pile and is essential for the destruction of pathogenic bacteria. Optimum temperature is between 40-60C (104-140F). Temperature will be checked and recorded at each visit.
- 4) A sample of the finished compost will be collected from each pile and will be sent to the Provincial Soil, Plant and Feed Laboratory on Brookfield Road in St. John's when the composting process is completed. The samples will be analyzed for nutrient content, PH, Organic matter, etc. Additionally, samples of the finished, static compost pile will be sent to A&L Canada laboratories in London Ontario or another comparable accredited lab., to ensure that the finished products meet standards for compost quality. The results of the analysis will be kept with the Abattoir's records.

#### Use of Non-SRM Compost:

After the composting process is complete, the compost will be handled and used in the following ways:

- 1) After the composting process is complete, any large bones should be separated from the pile and used as part of the base for the next compost pile. These will add structure and help aerate the pile. The bones will eventually break down.
- 2) The finished compost may be used as part of the carbon source in construction of the new piles. There should be no more than 50% compost in the carbon mix. Doing this will help establish the microbial community in the new pile which will speed up the composting process.
- 3) The finished compost will be spread on the farm forage fields at appropriate times of the year. The application rate will be determined with the assistance by the Provincial Soil Specialist.



4) Ideally, the compost will be spread immediately after it is finished. This may not be practical or even an option depending on the time of year that a pile finishes. If the compost cannot be spread immediately after it is finished, it can be stored at either the compost facility on a storage pad or for a short time on the field in which it is to be spread.

#### Use of SRM Compost:

1) SRM compost must also be sampled to ensure that the finished products meet CCME standards for compost quality. The results of the analysis will be kept with the Abattoir's records.

2) Once the SRM compost has been stockpiled for 6 years at which time it should not be applied to land that will produce food, is located close to residences or in areas frequently trafficked by people. It may be spread on non-crop producing land, grazing land, forage land or may be buried permanently in a marked and recorded location on site.

3) CFIA approval must be obtained regarding final use/disposal of SRM compost.

#### Pathogen Control:

Harmful pathogens will be killed when the temperature throughout the pile reaches 55C (131F) for three (3) consecutive days. This is monitored 15-20 cm (6"-8") from the top of the pile. Turning the pile when the temperature drops below 38C (100F) is recommended to stimulate the composting process and raise the temperature again. Repeated cycles over 55C (131F) will further reduce the presence of harmful pathogens.

#### Composting Times:

The pile/windrow will require 4-6 months to ensure it is properly degraded. This may be change based on environmental conditions such as air temperature.

#### General Notes:

The following are some general practices and notes related to composting offal:

- Previously finished compost can be added to pile to speed up establishment of microbial community thereby speeding up the compost process.

- Ensure the site is kept clean to deter scavengers, keep odors to a minimum and ensure good neighbor relations.

- If sawdust supply becomes limited other sources of carbon that can be used to build the pile/windrow are spoiled silage, dry bedded pack manure, shredded cardboard, finished compost, leaves and other high carbon organic material.

### **3.1 Compost Pad Details and Mitigation of Potential Issues**

We will have a concrete composting pad built with multiple sections appropriately distanced from all water ways and water sources to allow for composting of the SRM (if allowed) and non SRM waste. The entire pad will have a canopy built over top to ensure no runoff due to rainwater. (NL Slaughterhouse Guidelines 3.13)

The impervious floor along with absorbent materials such as lime, wood chips and soil will not allow any leaching from compost pad. The pad will also have a canopy roof to shed the rain or snow away from the compost piles this will prevent run off from the composting offal waste into the soil and ground water. (NL Slaughterhouse Construction 3.14).

The pad will be sloped so that any leachate will run back into the compost pile. Please see the diagram below of the compost pad layout. Note, where it says, "secondary bin", this will be used for the SRM. The compost pad will measure 60' with each compartment measuring 20'. The manure pad will be 20x20' and situated behind the barn and 15' away from the barn. All manure will be taken from the barn daily and stockpiled until it's ready to be used on the field as fertilizer.

We will have our composting pad at least 609m away from any residence. Mitigation We will be adding lime as well as high carbon materials such as wood chips to help absorb the liquids to aid the composting process. (NL Slaughterhouse Guidelines 3.6) Offal will be covered with high carbon material as soon as possible after laying down to prevent odor.

The potential of spills and unwanted packaging are possible on a construction site as well as in and around the abattoir. We will have a spill response kit in the event of a spill. Any Material waste or packaging will be disposed of at local landfill or recycled. If there should ever be a spill of blood or animal offal, we would use a tractor loader to scoop up the waste material along with the contaminated soil and remove it to the composting pad for composting. Any blood or animal waste spill, including contaminated soil, will be moved to our compost pad for proper composting process.

It is inevitable that there will be noise from the animals on the farm. Our distance from other residences is significant as shown on the attached map. Our location in a known agricultural area which makes our location well suited for animal noise.

When dealing with this type of operation, the potential to attract pests exists. Our pest control program will include regularly checked bait traps for rodents and fly traps for insects. By covering any decomposing animal waste with lime, wood chips and then soil we can help reduce birds or other animals looking for food. We will have a contract with a qualified pest control business to make regular inspections and rectify any issues immediately. The site will be kept clean and tidy.

#### **4.0. Environmental Factors**

This undertaking will only be utilizing the leased land (Lease # 156995). 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 305m 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 Victoria is approximately 595m. 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.

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. Omiachi Farms will 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 a minimum of 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 composted on approved compost pads on the farm. 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 then 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 Omiache Farms.

#### **4.1 Hazardous Waste Management Guidelines That Will be Followed**

##### **Oily Debris**

For oily debris (rags, towels and absorbents) lightly stained with oily products: a two-drum generation per month, per site is acceptable for disposal to an approved Waste Disposal Site within the province. Greater than two drums per month the waste would be considered a WDG/HW.

For oily debris soaked/saturated with solvents or oily products the two drum rule does not apply and this waste shall be considered WDG/HW. The oily debris shall be collected separately in approved contained by a WDG/HW transporter to an authorized facility outside the Province. If oily debris is generated on a regular basis, a waste collection container needs to be set up in the work area. The container shall be lined with a compatible liner (such as a clear plastic bag), properly labeled as oily rags, and closed when not in use.

##### **Used filters and Used Oil and Glycol**

The above waste is not permitted for disposal to landfills/waste disposal sites. They may be collected by a recycling program under MMSB. The regulations below will be followed: NLR 100/18 - Used Oil and Used Glycol Control Regulations under the Environmental Protection Act ([assembly.nl.ca](http://assembly.nl.ca)).

Any waste considered a waste dangerous good/hazardous waste (pesticides etc) shall be stored in proper containers and stored in specified storage area (indicated on site plan) and collected by an approved transporter.

#### **5.0 Conclusion**

Omiachi 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)

*Note: All offal will be composted on site. Should the rare situation every exist where offal requires to be transported on a roadway, all the following regulations will be followed.*

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.

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 kit's 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 Omiachi Farms. Proper training is a requirement from the CFL4 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 lunchroom 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

- I. 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 be separated during production by 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 Omiachi Farm will be responsible for placement of the offal onto the compost pad.
4. Volumes of non SRMS and other offal will be recorded by employees of Kettle Hill Farms and kept on record.
5. 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 composted. 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 airtight 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 airtight 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 be 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 airtight container.
5. Airtight container will be transported to an Eastern Waste Management Site in Robin Hood Bay, NL.