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Environmental Preview Report

Addendum 1

Industrial Composting Facility

Argentia Access Road, NL

To:

NL Department of Environment and Conservation

Environmental Assessment Division

P.O. Box 8700
St. John's, NL A1B 4 J6

Proponent:

Metro Environmental Ltd.
P.O. Box 19, 10 Point Road, Heart's Desire, NL A0B 2B0

24 March 2017

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Introduction

This addendum document is structured to address each of the 12 items of information in the same order as outlined in the letter issued by the minister on 31 January 2017 following the government and public review of the Environmental Preview Report.

1 – Building Design Details

Appendix 1 shows a set of drawings representing the proposed facility design and layout. The design shows an administration building (Building A) as before, and three free standing buildings for reception of raw materials, composting, curing, and storing of wood chips and finished compost. The design has changed from one larger building to three smaller buildings to meet the requirements of the National Building Code with respect to fire protection.

As can be seen on these drawings, the organic feedstock is received entirely within the confines of the building (Building B), by having the truck entering the building and the door closed for the unloading into the receiving pound. The raw material is combined with chipped carbonaceous material and mixed through the mixer, to then be moved into the stalls for initial composting over a 14 day period. The product is then moved to the composting windrow in Building C. The composting process in Building C involves turning/aerating the compost several times a week to achieve a substantially completed compost within a 6 to 8 week period thereafter. The compost will then be transferred to Building D for final curing and storage. Building D will also house the stock of wood chips and shredded carbonaceous material for composting and odor control.

Building A – Administration & staff amenities will be a single-story, slab-on-grade building of 280 square meters (10 x 28 meters). Building B will be steel framed, slab-on-grade, 1,070 square meters (27.5 x 39 meters). Building C will be steel framed, slab-on-grade, 1,500 square meters (27.5 x 54.5 meters). And Building D will be steel framed, slab-on-grade, 1,070 square meters (27.5 x 39 meters).

In Buildings B, there is provision for 6 stalls of 60 cubic meter of capacity of actively composting material. In Building C, there is windrow compost capacity of up to 2,000 cubic meters. The windrows in Building C will be 5 meters wide by 2.5 meter high. As the bulk density of the material decreases as composting progresses (up to a point), the respective tonnage capacities in Building B and Building C will be in the range of 300 tonnes and 500 tonnes.
Building D will be used for storage of final curing and finished compost as well as wood chip production. The locations and dimensions of the composting areas are shown in the drawings in Appendix 1.

Appendix 2 shows the equipment to be used for the composting operations. It includes a front-end loader, a mixer, a windrow turner and a wood shredder/chipper.

2 - Biofilter

The design and dimensions of the biofilters (one for each of Building B and Building C) is also shown on the drawings in Appendix 1. The biofilter for Building B – Receiving, Mixing & Primary Composting – is 34 meters long, 10 meters wide and 0.5 meter thick (filter media) (110 ft. long x 33 ft. wide x 20 inches thick). The biofilter for Building C – Secondary Composting – is 40 meters long, 10 meters wide and 0.5 meter thick (filter media) (130 ft. long x 33 ft. wide x 20 inches thick). Each biofilter is designed to handle the worst odor scenario, comparative to the building being full of swine. The ventilation system will draw fresh air into the buildings, establishing a slightly negative pressure within the building enclosure, and draw out the humid, odorous air from the building through a fan pushing that air through the biofilter pad. The ventilation rates will be up to 50,000 cubic feet per minute for each of the buildings and biofilters. The biofilter media will consist of a mixture of peat (50%), wood chip (40%) and compost/humus (10%). The media mixture will have an air void percentage of 40% to 50%. The media will be 0.5 meter thick over the biofilter plenum and structure. The media pads will then be about 10 meters wide and its length about 80% of the building length. Both buildings B and C will be equipped with a biofilter.

UV lighting is also proven to eliminate odors significantly, in food processing establishments. The Proponent will add UV lighting as necessary in strategic locations to further eliminate odors at the source.

3 – Operational Practices to Manage and Eliminate Odors

The following operational practices will be implemented:

a. scheduling feedstock deliveries to prevent trucks from waiting outside the facility to unload;
b. requiring feedstock delivery drivers to secure and cover their loads;
c. designing and maintaining the site access road to prevent spillage of feedstock from trucks approaching the facility;
d. minimizing the amount of time a building door is open at the facility;
e. blending organic feedstock with wood chafe and carbon fibre upon receipt of the feedstock;
f. using sufficient quantities of carbon fibre and bulking agents in the mixing process and throughout the entire composting process to minimize odour and prevent spontaneous combustion;
g. having sufficient quantities of carbon fibre and bulking agents on-site at all times;
h. conducting regular maintenance on mechanical ventilation and biofilters;
i. conducting vigilant monitoring of temperature, air space, moisture level and moisture distribution throughout windrows and bulk soil amendment;
j. ensuring full maturation has been achieved before removing the finished soil amendment product from inside the building.

Composting is a natural aerobic decomposition process. Properly done, odors are substantially limited. When the product mixtures do not have the right 30:1 carbon to nitrogen ratio, and/or are not properly and sufficiently aerated, anaerobic decomposition occurs and generates significant odors. Therefore, aerobic composting is about preventing decomposition to become anaerobic. This is achieved with proper composting recipes, operational practices, monitoring and measuring the temperatures and moisture levels, etc.

The overriding and most effective approach by the Proponent to eliminate and control odors that might be generated outdoors and reaching inhabited settlements at least 3 km away at ground altitudes is that the composting will be done completely indoors, with the use of biofilters. Such biofilters are proven to eliminate odors, and have been successfully used commonly for decades in farming and composting facilities worldwide.
The deliveries of feedstock that are a nuisance to the site and the surroundings, whether it is from odor, noise, unsafe vehicles or any other such significant considerations will be refused.

4 – Revised Production Estimates

Following discussions with the Pollution Prevention Division of the Department of Municipal Affairs and Environment, an initial minimum production of 5,000 tonnes of finished compost per year, to be reviewed on a six month basis in the start-up phase, is planned. This initial annual production target will be reached over a projected period of 6 months in the startup and commissioning phase of the facility. Compost production will be increased incrementally only if it can be demonstrated that composting is being conducted in an environmentally acceptable manner.

As the Proponent demonstrates successful performance, compost production levels will be permitted to increase.

5 – Commitment to Engage Consultant

As already indicated in the EPR document, and confirmed to the participants of the public meeting in Whitbourne last fall, the Proponent commits to engaging a qualified composting industry consultant at the initial stage of startup and commissioning of the proposed facility. As also previously indicated, such consultant will provide training to staff operating the facility.

The Proponent is already consulting with industry stakeholders such as existing composting facility operators, practicing agricultural and soil scientists/engineers, staff members of the Pollution Prevention Division to identify and recruit the best consultant. The consultant engaged by the Proponent will be approved by the Pollution Prevention Division.

6 – Employment Levels

Clarification from the EPR was required relative to the nature of contract of employment in the construction phase and in the operations phase. We have stated that the employment for the construction will be contractual in nature, i.e. various trade subcontractors will provide their own people to perform their contracts as is typically done in the construction industry. But we have no way of knowing at this stage whether these people are permanent employees of these contractors or if they are hired temporarily for specific projects. In other words, the construction of the facility will be contracted out.

We have also stated in the EPR that the personnel of the composting facility will be permanent employees of the company managing and operating the composting facility. The composting facility operation will also engage at times contractual personnel and service providers, such as composting consultants, trainers, engineering consultants, equipment specialists, accountants and/or lawyers, as it is done in every industry.

7 – Odor Management Plan

As required, a specific odor management plan for the facility is outlined below:

A - Managing Incoming Feedstock for Odor Control

- Know and document in advance the nature and composition of upcoming deliveries of feedstock to gauge the extent of odor impact;
- Ensure to have a sufficient supply of carbonaceous material available to mix and process the raw material immediately – At all times, maintain a minimum supply of 10 tonnes of wood chips or carbonaceous material in excess of daily production requirements;
- Schedule and spread over sufficient time incoming deliveries of feedstock to enable immediate unloading into the composting facility;
- Take the delivery vehicle and its payload entirely into the receiving building and close the door before unloading into the primary pound;
- Wash down unloaded vehicle to prevent organic waste from littering the loading area and the driveways of the composting facility site;
- After preparation of feedstock and carbon mixture, and its placement into active composting compartments, wash down receiving area, mixing pounds, mixer, receiving area floor and front-end loader;
- Sanitize with disinfecting detergent the receiving area and equipment weekly, such as on Friday afternoon before the weekend.

B - Managing the Composting Process for Odor Control

- Use a composting recipe to ensure a minimum carbon to nitrogen ratio of 30 to 1;
- Ensure and prevent excessive moisture content in the active composting mix to avoid anaerobic conditions; Provide a moisture content in the range of 40% to 60%;
- Know, measure and control the PH of the composting recipe; Monitor PH over time; Mixtures with PH in excess of 8.5 will release nitrogen in the form of ammonia and create odors;

- Provide enough range in the component particle sizes of the composting mix to obtain good porosity, thereby providing sufficient porosity for better aeration and therefore reduction of odorous emanations;
- Turn and aerate composting mix sufficiently frequently to maintain aerobic conditions – Turn/aerate daily in the active composting stalls (Building B) & turn/aerate windrows 3 to 4 times per week in active composting phase (Building C);
- Prevent windrow piles to be too high and large – maximum height to be 8 feet;
- Maintain good records of composting process activities to enable correlation with any odor problems;
- Record events and time duration when odors outside the buildings become more noxious than acceptable.

C - Eliminating Odors

- Keep doors and building openings closed at all times, except for allowing trucks in and out of the building for receiving deliveries of raw materials, transferring product from building to building;
- Operate the fresh air ventilation system
    - to maintain adequate compost piles temperatures;
    - control air humidity within the building;
    - exhaust all building ventilation air through the biofilter.
- Choose a time or day with least wind to move product from building to building;
- Use blanket of finished compost or wood chip or peat to cover product in active composting stalls (Building B);
- Maintain and inspect weekly the operation and performance of biofilters
    - Perform a full visual inspection
    - Remove excessive snow as required in the winter to enable full ventilation operation of the biofilter pads;
    - Spray water as required over biofilter pads during summer and/or dry periods to maintain sufficient water and humidity in the biofilter media;
    - Check for wind erosion or any deterioration of the biofilter pads and media;
    - Check for excessive compaction of the biofilter media;
    - Biofilter media must be replaced every 3 to 5 years to re-establish adequate porosity, depending on weather, snow, rain falls and wind conditions;
    - Record biofilter maintenance and inspection activities.

D – Receiving, Recording and Addressing Public Complaints

- Provide / establish publically accessible contact information for the composting facility (website, phone directory listing, email address, etc);
- Establish complaint information form on website;
- Upon receipt of complaint or comment, acknowledge receipt to the sender;
- Document / record complaints by date, time, nature of complaint, replies to the complainants, issue complained and addressed (odor, vector, others);
- Address complaint as necessary by making changes to process, raw material handling or whatever will be required to eliminate the odor, vector or nuisance in question;

- Report back to the complainant with confirmation of the solution and its effect.

Complaint Receipt Form

<table>
<tr><td>Complaint Received

Date:

Time of incident:

Time reported to facility:

Date and time reported to MOE (if applicable):</td><td>Complainant

Name:

Address:

Phone:</td></tr>
<tr><td colspan="2">Details (e.g., type of complaint; for an odour complaint, description of the odour, including odour intensity based on a scale of 1-10, with 10 being the strongest):</td></tr>
<tr><td colspan="2">Meteorological Conditions</td></tr>
<tr><td>Temperature:

Wind Speed:

Wind Direction:</td><td>Cloud Cover:

Full Partial None

Precipitation:</td></tr>
<tr><td colspan="2">Site Activities (windrow turning, waste receipt, screening etc.):</td></tr>
<tr><td colspan="2">Response</td></tr>
<tr><td>Actions taken to remediate cause of complaint:

Action to prevent recurrence:</td><td>Follow Up Call:</td></tr>
</table>

E – Roles and Responsibilities

- Facility Manager is responsible to implement and enforce the actions and operating practices required by the Odor Management Plan;
- Facility Manager is responsible to provide training to Facility Administrator and Facility Workers to enable a successful and effective implementation and enforcement of the Odor Management Plan;

- Facility Administrator is responsible to receive, report, communicate and record the complaints, its communications to facility staff and complainant, the solutions and the issues addressed;
- Facility Workers are responsible to know and understand the underlying principles behind the Odor Management Plan, and to operate the facility and its process according to the best practices and requirements of the Odor Management Plan.

8 – Vector Management Plan

As required, a specific vector management plan for the facility is outlined below:

A – Pest and Vector Species

- Birds
  - Gulls
  - Crows
  - Pigeons
- Vermin
  - Rats
  - Mice
  - Squirrels
- Insects
  - Crawling Insects
  - Flying Insects
    - House flies
    - Mosquitoes

B – Treatments and Controls

- Birds
  - Repellents
    - Apply bird spikes on building ledges to prevent birds from landing /resting / dwelling;
    - Install horned owl scarecrows at roof peaks and caps;
    - Install owl scarecrow kites on roofs and high points throughout the exterior of the facility – These kites are particularly effective in our environment due to the frequent windy conditions that we experience;
  - Bird screens will be installed in all ventilation inlets and outlets of each buildings.

- Vermin
  - Apply standard traps and chemical control technique that are standard in all agricultural, industrial, commercial and residential settings;
  - Engage the services of professional commercial exterminators;

- Insects

- Apply traps and repellents such as sticky tapes, UV traps, UV flying insects killer in the affected areas inside the primary composting building;
- Apply approved sprayed chemical extermination products to control temporary onset of insects that could arise from time to time;
- Refer to specific Fly Management Plan for House Flies.

C – Operations Best Practices

- Birds
  - Eliminate attraction of scavenger birds by handling all proteins and other attractive organic raw materials inside the enclosed building;
  - Know and document in advance the nature and composition of upcoming deliveries of feedstock to gauge the extent of attractiveness to scavenger birds;
  - Schedule and spread over sufficient time incoming deliveries of feedstock to enable immediate unloading into the composting facility;
  - Take the delivery vehicle and its payload entirely into the receiving building and close the door before unloading into the primary pound;
  - Wash down unloaded vehicle to prevent organic waste from littering the vehicle and the driveways of the composting facility site, which would attract scavenger birds;
- Vermin
  - Ensure to have a sufficient supply of carbonaceous material available to mix and process the raw material immediately – At all times, maintain a minimum supply of 10 tonnes of wood chips or carbonaceous material in excess of daily production requirements;
  - After preparation of feedstock and carbon mixture, and its placement into active composting compartments, wash down receiving area, mixing pounds, mixer, receiving area floor and front-end loader;
  - Report to fellow workers and management any sighting of vermin, and take immediate measures or extermination action possible;
- Insects
  - Eliminate attraction and breeding of insects outdoors by handling all proteins and other attractive organic raw materials inside the enclosed building;
  - Perform all unloading operations inside the building with all doors closed;
  - Process raw material immediately upon receiving;
  - Wash down unloaded vehicle to prevent organic waste from littering the vehicle and the driveways of the composting facility site, which would attract and support breeding of flying and crawling insects;
  - After preparation of feedstock and carbon mixture, and its placement into active composting compartments, wash down receiving area, mixing pounds, mixer, receiving area floor and front-end loader;
- Maintain and inspect weekly the integrity and performance of vector control systems
  - Perform a full visual inspection of repellents, traps, poisons, UV powered traps / repellents, control devices located both indoor and outdoor;
  - Identify any accidental displacement of vector control devices or systems, and re-instate as necessary;

- Reset any traps or device as necessary to ensure constant maximum protection and effectiveness;
- Document inspections and maintenance activities and use the information to improve the vector control program over time.

D – Receiving, Recording and Addressing Public Complaints

- Provide / establish publically accessible contact information for the composting facility (website, phone directory listing, email address, etc);
- Establish complaint information form on website;
- Upon receipt of complaint or comment, acknowledge receipt to the sender;
- Document / record complaints by date, time, nature of complaint, replies to the complainants, issue complained and addressed (odor, vector, others);
- Address complaint as necessary by making changes to process, raw material handling or whatever will be required to eliminate the odor, vector or nuisance in question;
- Report back to the complainant with confirmation of the solution and its effect.

E – Roles and Responsibilities

- Facility Manager is responsible to implement and enforce the actions and operating practices required by the Vector Management Plan;
- Facility Manager is responsible to provide training to Facility Administrator and Facility Workers to enable a successful and effective implementation and enforcement of the Vector Management Plan;
- Facility Administrator is responsible to receive, report, communicate and record the complaints, its communications to facility staff and complainant, the solutions and the issues addressed;
- Facility Workers are responsible to know and understand the underlying principles behind the Vector Management Plan, and to operate the facility and its process according to the best practices and requirements of the Vector Management Plan.

F – Fly Management Plan

1. Identify the kind of flies present and attracted to the raw materials and the compost piles
    a. Non Biting Flies – Attracted to decomposing protein matter

i. House fly

ii. Horn Fly

iii. Stable fly

iv. Face Fly

b. Biting Flies (water born) – Attracted to warm blooded mammals

i. Horse Flies

ii. Black Flies
iii. Deer Flies
iv. Mosquitoes
v. Other biting flies

2. Install fly traps
    a. Use the traps that are specific to the species of flies for respective times of year.
    b. Locate the traps in all places/areas flies appear to be attracted, without excessive interferences with the day to day composting operations.

3. Clean up the flies already present with traps
    a. Use traps that are specific to the species of flies to be exterminated. Suppliers can provide the right traps.
    b. The heat generated by proper composting will kill fly eggs, therefore reducing fly populations.

   c. Ultra Violet lighting traps are also effective.

4. Use odor control to reduce fly attraction to raw materials and compost piles
   a. Manage hand-in-hand with odor management of facility.
   b. Investigate odor control sprays that could be effective with fly management at specific locations, such as the receiving area, or onsets of fly population explosions.

5. Consult and engage as necessary a commercially available professional exterminator service.

6. Consult the composting expert consultant on fly management at startup and commissioning.

7. Sanitation is the key to controlling house flies.
   a. Wash down and sanitize with disinfecting detergents the receiving area and equipment to prevent additional fly breeding grounds.

8. Monitor weekly and document the fly and insects presence throughout the facility to learn and anticipate the fluctuations (seasonal or others) in population, and identify any correlations with nature of raw materials, composting recipes, indoor temperatures, humidity levels, odor levels, and/or any other pertinent parameters.

9. Rely on useful and practical guidance documents on fly management, such as
   a. Fly Management: How to Comply with Your Environmental Permit, Version 1, April 2013, http://www.organics-recycling.org.uk/uploads/article2594/LIT_8177_a04f7c%20%20Fly%20management.pdf, published by Environment Agency, Horizon House, Deanery Road, Bristol BS1 5AH, Email: enquiries@environmentagency.gov.uk, www.environment-agency.gov.uk , © Environment Agency 2013
   b. Integrated Fly Management on Mink Farms in NL, Department of Natural Resources, Production & Market Development Division, www.nr.gov.nl.ca/agric/

9 – Emergency Response Plan

The Emergency Response Plan is presented Appendix 3. Upon startup of the facility, actual names and telephone numbers of individuals and staff assigned to the various roles in the plan will be filled in.

10 – Decommissioning Plan

If and when the decommissioning of the proposed industrial composting facility becomes necessary, the Proponent plans to proceed as follows:

a. stop the receiving of raw materials,

b. complete the composting of remaining raw materials,
c. sell / remove remaining finished product,
d. clean and disinfect the entire facility,
e. demolish or convert the facility to another use.

Any eventual site clean-up, repair and rehabilitation, and removal or securing of infrastructure, equipment and access prior to closure of the industrial composting facility will be done in consultation with the Department of Environment and will meet all the regulatory requirements that may be in force at that time.

11 – Fire Protection Planning

Fires in composting are very rare, but the proposed composting facility will be equipped with all the necessary fire protection equipment and systems nonetheless.

The first consideration about the potential risk of fire spreading to the surrounding environment is to contain and extinguish a fire at the source. The proposed composting facility will process and hold all materials inside the buildings. The fire suppression systems and firefighting equipment will be designed to serve the facility according to all codes and standards in force. These codes are the National Building Code 2010, the National Fire Code 2010 and all the pertinent NFPA[1] standards that are referred to and stipulated in the Canadian National Building and Fire codes.

The facility will require a substantial water service to maintain moisture in the compost piles and for regular wash downs. There will be a dug well and pump to provide water service to Building A, the reception and administration building. Serviced with a dug or drilled well, Building B will have a water service capacity of 12 cubic meters per hour (50 USGPM) at 2 Bars (30 Psi). Building C will require a smaller water service for operations, about half of that of Building B at the same pressure.

The building water service will be used to fight any Class A fire within the building, in addition to fire extinguishers. Any eventual spontaneously ignited fire in a compost pile will be fought with water and with the use of the front end loader to isolate such fire. The smoke generated by such fire can be evacuated effectively with the high capacity building ventilation system.

A preliminary Fire and Emergency Protection Plan for the facility is presented in Appendix 4.

12 – Environmental Emergency Contingency Plan

This plan is for the Metro Environmental Industrial Composting Facility
Located at kilometer 4, Route 100, Argentia Access Road, Avalon Peninsula, Newfoundland

[1] NFPA – National Fire Protection Associations - http://www.nfpa.org/

Day Time Personnel normally at the facility – 4 to 8 people
Visitors (as suppliers, customers and others) – 2 to 12 people

Emergency Contacts

Owner/Operator Name, Address, Phone Numbers, Email addresses

Alternate Name, Address, Phone Numbers, Email addresses

Medical Emergency – 911
Facility Medical Response #: St. John's General Hospital - Tel: 777 6300
Fire/Spill Emergency -- 911
Local Fire Dept #: 722 1234
Security & Police – 911
Facility Security # - RCMP: 1 800 709 7267
Local Police # - Royal Newfoundland Constabulary: 729 8000

Occupational Health and Safety Branch
Department of Employment and Labor Relations
Industrial Accident: 729 4444
Poison Information Centre
St. John's: 722 1110

Health & Safety Manager (HSM)
Name:
Phone: or cell
Safety Coordinator (SC)
Name:
Phone: or cell
Workplace Health, Safety and Compensation Commission:
146-148 Forest Rd., P.O. Box 9000, St. John's, NL A1A 3B8
Tel: (709) 778-1000, Fax: (709) 738-1714
Toll Free: 1-800-563-9000

Utility Company Emergency Contacts

Electric: Newfoundland Power - Power Outages and Emergencies (24 hour service)

Telephone: 1-800-474-5711

Safe Meeting Place (in case of evacuation) Muster Station – Administration Building

Emergency Response Resources and Equipment

Resource / Equipment	Location
Fire Extinguishers	Building A, Building B, Building C, Building D, others mounted on machines and equipment

Add'l. Fire Fighting Equipment	
Emergency Water Resources	
Shovels	Bldg. A, Bldg. B
First Aid Kits	Bldg. A, Bldg. B
Spill Kits	Bldg. A, Bldg. B, Bldg. C, Bldg. D
Protective Clothing	Bldg. A, Bldg. B
Sand bags / Dyking Materials	

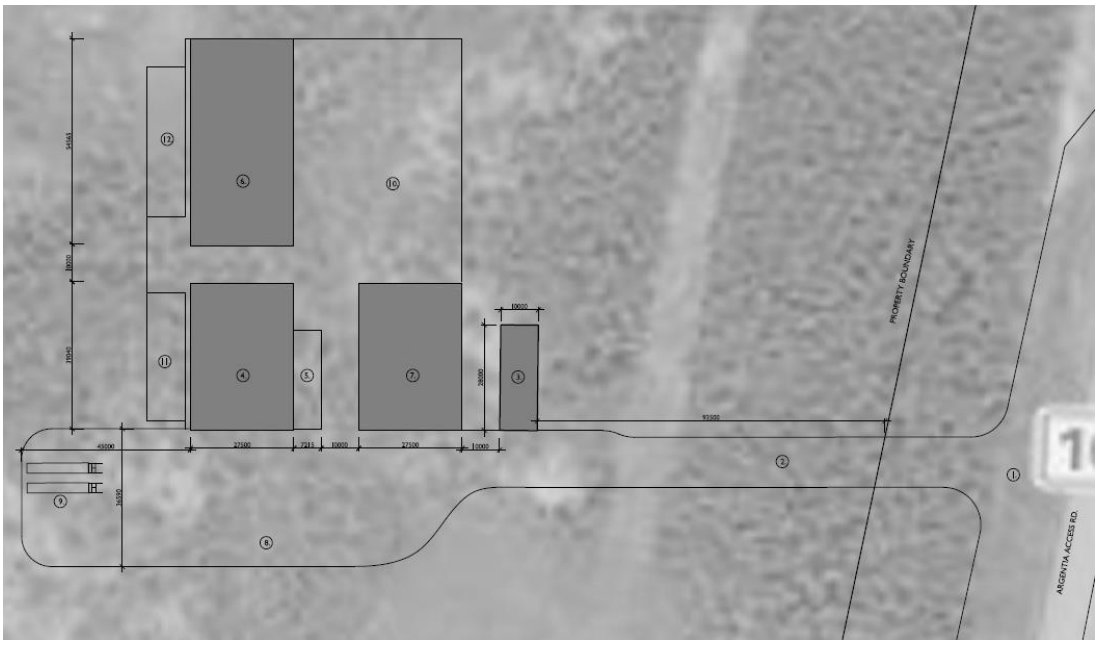
Hazardous Goods Storage – A detailed hazardous materials management plan will be submitted to the Pollution Prevention Division prior to issuance of a Certificate of Approval.

Product	Location Stored	Comments
Diesel Fuel	Bldg. B	Outside
Lubricants	Bldg. B	Stored in 20 L pails & 5 L containers
Pest Control Products	Bldg. A, Bldg. B, Bldg. C	Main storage in Bldg. B; MSDS in Bldg. B

Site Map

Location of the following on the facility site plan (or other part of the site where chemicals are stored):

☐ All buildings/structures
☐ Slope of land (drainage direction)
☐ Watercourses: ponds, streams, wetlands, etc.
☐ Fire extinguishers
☐ First aid kits
☐ Spill kit or sources of absorbent materials
☐ Emergency water source for firefighting (e.g. pond or dugout)
☐ Septic tanks, culverts, drainage ditches
☐ All existing wells
☐ Petroleum storage
☐ Pesticide
☐ Protective clothing storage



Petroleum Contingency Planning

☐ In case of fire call 911 or local fire department at _____.
☐ Petroleum spills over 100 liters (flammable liquids and waste oil) must be reported to the federal authorities under the Environmental Emergency Regulations,

Newfoundland and Labrador, **709-772-2083** or **1-800-563-9089***
Regional Director, Environmental Enforcement Directorate
Atlantic Region, Environment Canada
Queen Square, 45 Alderney Drive
Dartmouth NS B2Y 2N6
Fax: 902-426-7924

☐ Small spills of petroleum or oil can cause extensive water damage and should be cleaned-up or contained.

Petroleum spill clean-up kit is available in Bldg. A, Bldg. B, Bldg. C and Bldg. D (include in the kit appropriate protective clothing, containers for contaminated waste, absorbent material such as sawdust or kitty litter, and a shovel).

In Case of Spills:

1. Eliminate the source of the spill.
2. Small spills can contaminate water – clean them up!
3. Report spills over 100 liters to the Provincial Emergency Program, Medical Health Officer and local fire department.
4. Containment – Construct berms or divert flow to prevent spread of fuel.
5. Apply absorbent material as required, which is located in Bldg. B.
6. Assess extent of spill

☐ Did the petroleum reach surface water?
☐ How much was released and for what duration?
☐ Did any damage occur to property, fish or wildlife or their habitat, or an employee?
☐ Did the spill leave the property?
☐ Can the spill potentially reach surface waters?
☐ Could a future rain event cause the spill to reach surface waters?
☐ Are potable water sources (wells or surface water) in danger?
7. Contact Service NL for recommendations on disposal options for any material, soil or liquid contaminated with petroleum. If there is no danger of leaching into a watercourse, contaminated soil may remain in place or be moved to a safer area and spread. Soil microbes will break down the petroleum product and decontaminate the soil over time.
8. Post spill assessment - Review actions taken to contain or minimize the spill.
☐ Can you determine the cause of the spill or discharge?
☐ Were there signs present before the incident?
☐ How could this be prevented?
☐ How did the cleanup progress?
☐ What has to be changed on your contingency plan?

In Case of Fire:

1. Notify attending fire department of location, type and quantity of petroleum product.
2. Construct containment berms to collect water and fuel runoff.
3. Notify Provincial Emergency Program if fire has potential to spread beyond composting site, affect other properties or persons or lead to a reportable spill.

Pesticide Contingency Planning

- Report any potential toxic chemical escape to local Medical Health Office – Eastern Health Corporation
- Report spills greater than 5 kg or 5 L of pesticide products or mixtures (and wastes containing materials with a PCP#) to Provincial Emergency Program.
- In case of fire call 911 or local fire department at _____.

An up-to-date inventory of stored pesticides, as well as all labels and MSDS sheets for pesticides used and stored on site, are kept in the site office and the pesticide storage area. Pesticide storages are located at Bldg. B (see Site Map).
A pesticide spill cleanup kit is available in (include in the kit appropriate protective clothing, containers for contaminated waste, absorbent material such as kitty litter or sawdust, and a shovel).

In Case of Spills:

1. Report spills over 5 kilograms or 5 liters of pesticide product, pesticide mixture or waste containing a pesticide (anything with a PCP #) to Provincial Emergency Program and Medical Health Officer.
2. Put on appropriate personal protective clothing which is located in Bldg. A and Bldg. B. (A list of personal protective clothing should be provided).

3. Prevent exposure of people and animals to the pesticide and its fumes.
4. Prevent the spread of the pesticide. Dry pesticides can be swept up and reused if they have not become wet or contaminated. Use sawdust or absorbent material to prevent spread of liquid pesticides. Sawdust is available at Bldg. A and Bldg. B.
5. Assess extent of spill
   - Did the pesticide reach surface water?
   - How much was released and for what duration?
   - Did any damage occur to property, fish or wildlife or their habitat, or an employee?
   - Did the spill leave the property?
   - Can the spill potentially reach surface waters?
   - Could a future rain event cause the spill to reach surface waters?
   - Are potable water sources (wells or surface water) in danger?
6. Dispose of absorbent material in a safe and suitable manner (in a clearly labeled garbage container).
7. Decontaminate the surface of the spill site (i.e., wash floor areas with bleach and detergent; excavate or remediate contaminated soil).
8. Where soil is contaminated, remove top 5-7 cm of soil, cover area with uncontaminated soil and add lime and/or activated carbon. Contact NL Department of Environment, Pollution Prevention Division for instructions on how to dispose of affected soil.
9. If the spill occurs beside a watercourse, remove the top layer of contaminated soil immediately and relocate it to a safe site.
10. Post spill assessment - Review actions taken to contain or minimize the spill.
    - Can you determine the cause of the spill or discharge?
    - Were there signs present before the incident?
    - How could this be prevented?
    - How did the cleanup progress?
    - What has to be changed on your contingency plan?

In Case of Fire:

1. Notify attending fire department of location, type and quantity of pesticides.
2. Be prepared to construct containment berms to collect water and pesticide runoff.
3. Notify Provincial Emergency Program if fire has potential to spread beyond composting site, affect other properties or persons or lead to a reportable spill.

Processing or Disposal of Materials Unsuitable for Composting

The first line of defense is to avoid receiving and taking custody of any material that would not be suitable for composting, with the facilities and equipment available at the site.

- Know in advance the nature of the raw material coming to be delivered at the site;
- Pre-approved the delivery of any raw material in question;
- Refuse delivery of any raw material that could be unsuitable for composting and processing;

In the unlikely event that any unsuitable or non-compostable raw material is delivered to the site, a local qualified waste management service provider will be called to collect and remove the raw

material at the composting site. The waste management service provider will then be directed to consult with Service NL and to dispose of the product according to regulations and industry standard best practices.

Conclusion

The 12 points of additional information are provided herein as required by the minister. Again, the Proponent wishes to reiterate his commitment to building and operating the proposed industrial composting facility with the best and latest design and operating practices, and meeting all the requirements of codes and regulations currently in force.

With all the planning and precautions taken by the Proponent in the site selection, facility design and composting technologies, the probability and risk of any environmental impact is very low to nil.

The salient facts about the proposed facility remain:

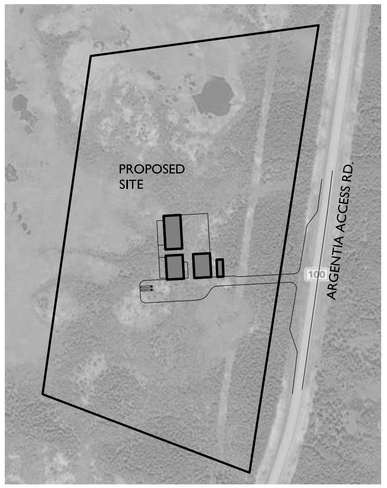
1. All raw material feedstock will be received, unloaded and processed in a completely indoor facility;
2. The isolation of the facility site is second to none
    - 2.7 km from the closest residences in Little Island Cove,
    - 3.3 km from Markland,
    - 4.4 km from Whitbourne,
    - 3.9 km from the T' Railway site,
    - 7.7 km from the Placentia Junction cabin area,
    - 4.5 km from the Peak Pond cabin area,
    - 6.0 km from Holiday Hill cabins,
    - 8.0 km from Blaketown, and
    - 4.0 km from the highway stop on Trans-Canada, with gas stations, restaurants, motel and the Tourism Information Centre.
3. Prevailing winds are from the south and south west in the summer, and from the north and north east in the winter, away from Whitbourne and Markland. Other inhabited surrounding areas are further away from the direction of the prevailing winds.
4. The greater environmental and economic benefits to the Avalon region from the implementation of the proposed facility must be clearly considered and understood in the environmental review and analysis of this project. These significant benefits are:
    a. Reducing disposal of organic waste to landfill and associated greenhouse gas emissions;
    b. Recycling two types of solid waste – organics and wood;
    c. Reducing the current waste management landfill operating cost and extending the service life of the landfills;
    d. Producing value-added products at a lower price than the current supply from the mainland, that are in real demand in Newfoundland;
    e. Generating tax revenues to Federal and Provincial coffers.

This proposed industrial composting facility is a great opportunity to improve our environmental stewardship, with clear, substantial, long term benefits that should not be ignored.

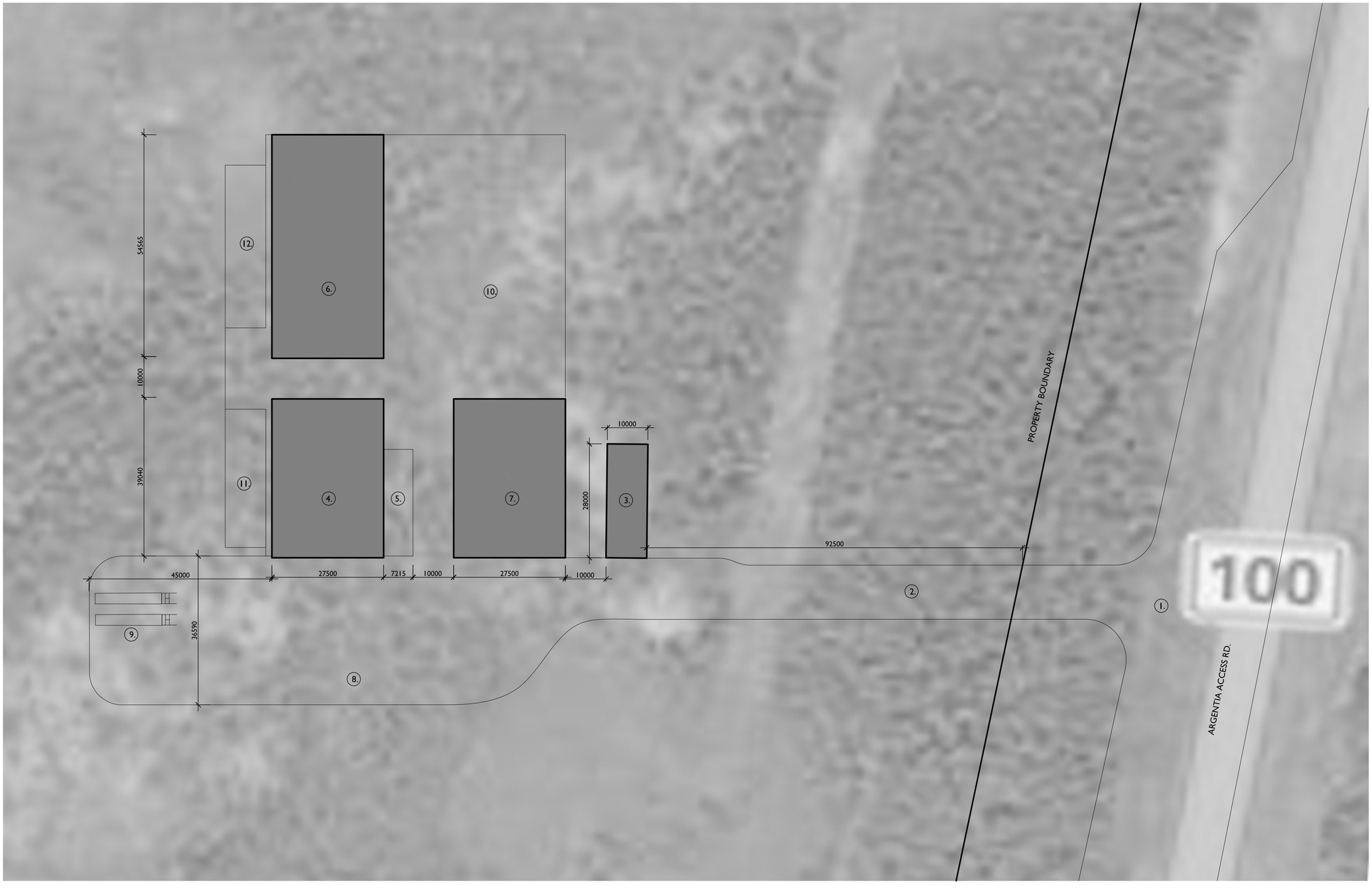
Appendix 1 – Site and Facility Layout

LEGEND

1. PROPOSED NEW VEHICLE INTERSECTION. TO COMPLY WITH RELEVANT REGULATIONS.
2. DRIVEWAY INTO PROPOSED SITE. 10M. W. X 120M. L.
3. BUILDING A. (10M. W. X 28M L. = 280M SQU.)
   - SCALE HOUSE
   - OFFICE
   - LUNCH ROOM, WASHROOM & CHANGE ROOMS
4. BUILDING B. (27.5M. L. X 39M W. = 1070M. SQU.)
   - DROP OFF & IN-VESSEL COMPOSTING
   - PROCESSING SITE.
5. UNDER COVER STORAGE AREA (190M. SQU.)
6. BUILDING C. (27.5M W. X 54.5M L. = 1500M SQU.)
   - COMPOSTING WINDROWS
7. BUILDING D. (27.5M. L. X 39M W. = 1070M. SQU.)
   - PICK-UP & CURING AREA
   - STORAGE AREA
8. VEHICLE TURNING AREA AND PARKING
9. MAXIMUM TRUCK SIZE (2.6M. W X 20M L.)
10. OUTDOOR STORAGE AREA
11. BUILDING B. BIOFILTER (10M. W. X 34M L.)
12. BUILDING C. BIOFILTER (10M. W. X 40M L.)



M1 LOCATION PLAN
SCALE: 1:5000



M2 PARTIAL SITE PLAN
SCALE: 1:500

Innovative Development & Design Engineers Ltd .
Anderson House
42 Power's Court,
St. John's, NL A1A 1B6
Tel: (709) 368-8870
Web: www.iddel.ca

Notes:

Drawn by: RC Date: -, 2017
Checked by: HA Date: -, 2017
Approved by: HA Date: -, 2017

Rev. #:	Description:	Date:
B	IFA - LAYOUT REFINEMENT	MAR 17
A	ISSUED FOR APPROVAL	OCT 16

Stamp: Permit:

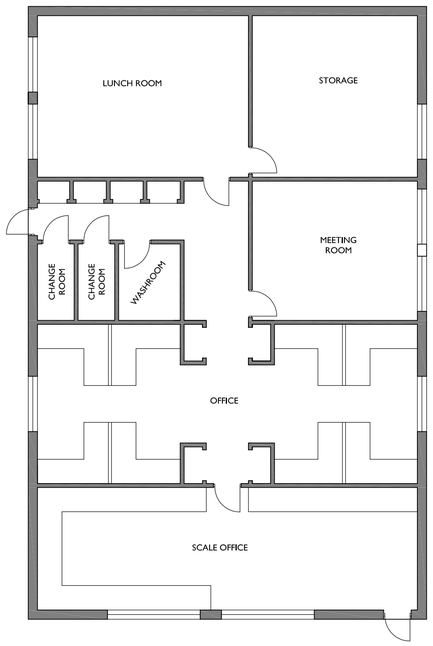
Consultants:

Client:

Project:
PROPOSED COMMERCIAL INDOOR COMPOSTING FACILITY
ARGENTIA ACCESS ROAD, NL

Drawing Title:
LOCATION PLAN AND PARTIAL SITE PLAN

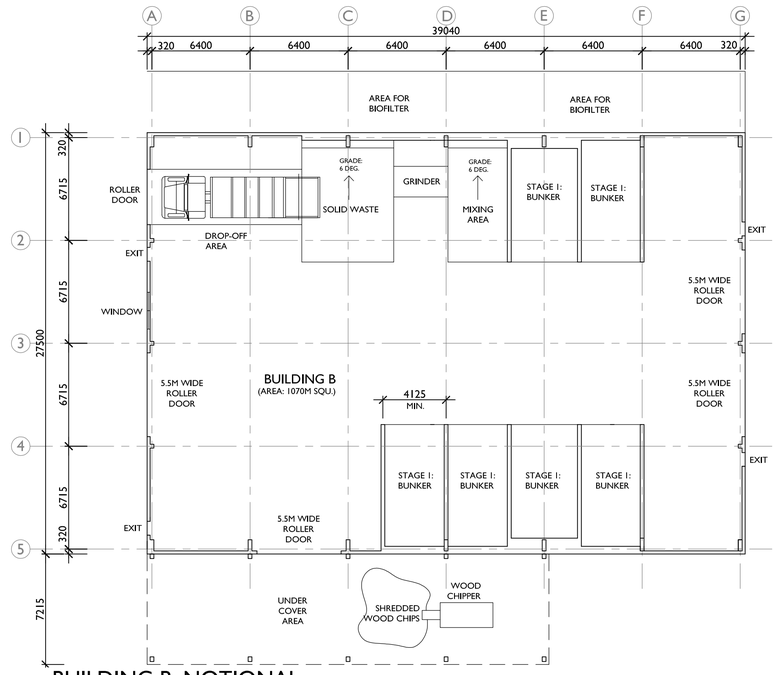
Project No.: 160919
Scale: AS INDICATED @ A1
Drawing No.: M-101
Revision No.: B
TRUE NORTH



TRUCK SCALE

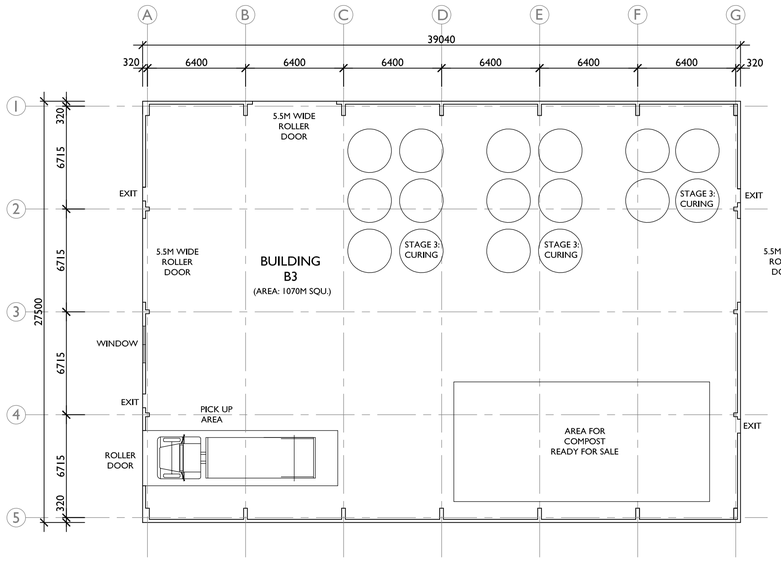
M1 BUILDING A. NOTIONAL LAYOUT

SCALE: 1:100



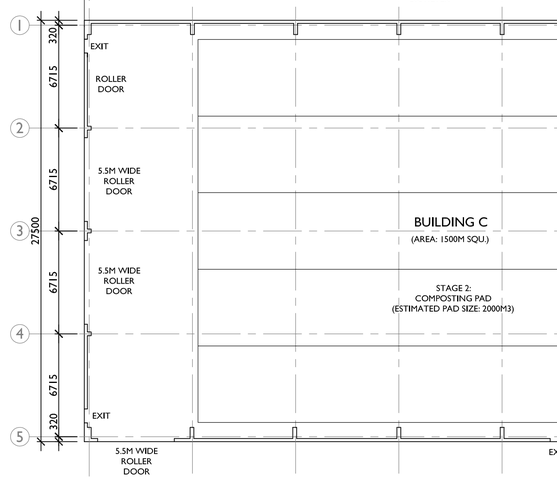
M2 BUILDING B. NOTIONAL LAYOUT

SCALE: 1:200



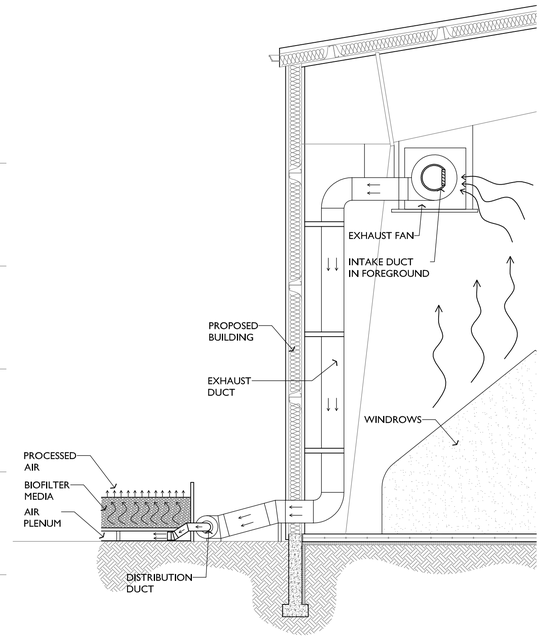
M4 BUILDING D. NOTIONAL LAYOUT

SCALE: 1:200



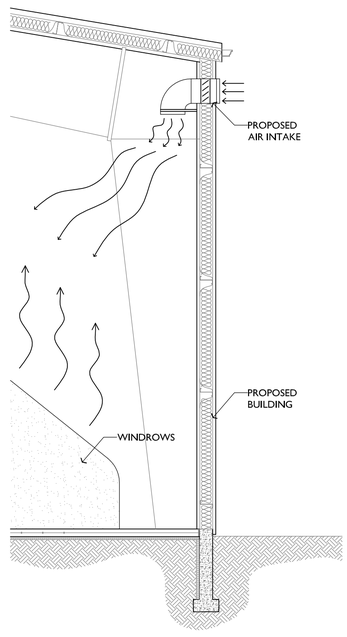
M3 BUILDING C. NOTIONAL LAYOUT

SCALE: 1:200



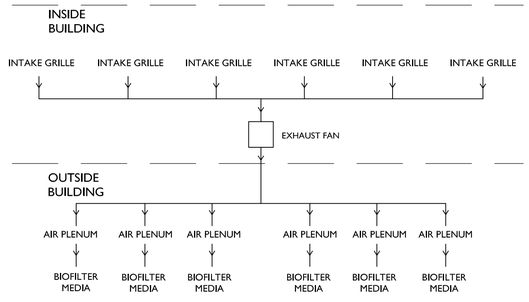
M5 BIOFILTER TYPICAL SECTION

SCALE: 1:50



M6 TYPICAL AIR INLET SECTION

SCALE: N.T.S.



M7 TYPICAL BIOFILTER LINE DIAGRAM

SCALE: N.T.S.

Innovative Development & Design Engineers Ltd .
Anderson House
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St. John's, NL A1A 1B6
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Web: www.iddel.ca

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Stamp: Permit:

Consultants:

Client:

Project:
PROPOSED COMMERCIAL INDOOR COMPOSTING FACILITY
ARGENTIA ACCESS ROAD, NL

Drawing Title:
BUILDING LAYOUTS & DETAILS

TRUE NORTH

Project No.: 160919
Scale: AS INDICATED @ A1
Drawing No.: M-102
Revision No.: B

Appendix 2 – Equipment

Equipment required for the composting operations include:

- Mixer
- Front end loader
- Windrow turner
- Chipper/shredder
- Rotating Screen

A - Mixer

Figure 1 - Kuhn Knight VT 168, Vertical Maxx Twin Auger Mixer

B – Front End Loader / Tractor

Figure 2 - Kubota M9660

C – Windrow Turner

Figure 3 - Compost Windrow Turner

D – Chipper / Shredder

Figure 4 - Vermeer Horizontal Grinder

E – Rotating Screen

Figure 5 - Vermeer Trommel Screen

Appendix 3 – Emergency Response Plan

EMERGENCY ACTION PLAN

for

Argentia Access Road Industrial Composting Facility

Metro Environmental Ltd.

DATE PREPARED:

EMERGENCY PERSONNEL NAMES AND PHONE NUMBERS

DESIGNATED RESPONSIBLE OFFICIAL (Highest Ranking Manager at

Argentia Access Road site):

Name: Ted Penney Phone: (709 597 2452, 709 588 2452)

EMERGENCY COORDINATOR:

Name: Ted Penney Phone: (709 597 2452, 709 588 2452)

AREA/FLOOR MONITORS (If applicable):

Area/Floor: Name: Phone: (_____)
Area/Floor: Name: Phone: (_____)

ASSISTANTS TO PHYSICALLY CHALLENGED (If applicable):

Name: Phone: (_____)
Name: Phone: (_____)

EVACUATION ROUTES

- Evacuation route maps have been posted in each work area. The following information is marked on evacuation maps:

1. Emergency exits
2. Primary and secondary evacuation routes
3. Locations of fire extinguishers
4. Assembly points – Muster Stations

- Site personnel should know at least two evacuation routes.

EMERGENCY CONTACTS

Medical Emergency – 911
Facility Medical Response #: St. John's General Hospital - Tel: 777 6300
Fire/Spill Emergency -- 911
Local Fire Dept #: 722 1234
Security & Police – 911
Facility Security # - RCMP: 1 800 709 7267
Local Police # - Royal Newfoundland Constabulary: 729 8000

Occupational Health and Safety Branch
Department of Employment and Labor Relations
Industrial Accident: 729 4444
Poison Information Centre
St. John's: 722 1110

Health & Safety Manager (HSM)
Name: Ted Penney
Phone: 709 588 2452 or cell: 709 597 2452

Safety Coordinator (SC)
Name: Ted Penney
Phone: 709 588 2452 or cell: 709 597 2452

Workplace Health, Safety and Compensation Commission:
146-148 Forest Rd., P.O. Box 9000, St. John's, NL A1A 3B8
Tel: (709) 778-1000, Fax: (709) 738-1714
Toll Free: 1-800-563-9000

UTILITY COMPANY EMERGENCY CONTACTS
Newfoundland Power - Power Outages and Emergencies (24 hour service)
Telephone: 1-800-474-5711

EMERGENCY REPORTING AND EVACUATION PROCEDURES

Types of emergencies to be reported by site personnel are:

- MEDICAL
- FIRE
- SEVERE WEATHER
- BOMB THREAT
- CHEMICAL SPILL
- STRUCTURE CLIMBING/DESCENDING
- EXTENDED POWER LOSS
- OTHER (specify)_____

(e.g., terrorist attack/hostage taking)

MEDICAL EMERGENCY

- Call medical emergency phone number (check applicable):

  - ☐ Paramedics
  - ☐ Ambulance
  - ☐ Fire Department
  - ☐ Other

Provide the following information:
a. Nature of medical emergency,
b. Location of the emergency (address, building, room number), and
c. Your name and phone number from which you are calling.

- Do not move victim unless absolutely necessary.
- Call the following personnel trained in CPR and First Aid to provide the required assistance prior to the arrival of the professional medical help:

Name: Phone:_____

Name: Phone: _____

- If personnel trained in First Aid are not available, as a minimum, attempt to provide the following assistance:
  1. Stop the bleeding with firm pressure on the wounds (note: avoid contact with blood or other bodily fluids).
  2. Clear the air passages using the Heimlich maneuver in case of choking.
- In case of rendering assistance to personnel exposed to hazardous materials, consult the Material Safety Data Sheet (MSDS) and wear the appropriate personal protective equipment. Attempt first aid ONLY if trained and qualified.

FIRE EMERGENCY

When fire is discovered:

- Activate the nearest fire alarm (if installed)
- Notify the local Fire Department by calling _____.
- If the fire alarm is not available, notify the site personnel about the fire emergency by the following means (check applicable):
  - ☐ Voice Communication
  - ☐ Phone Paging
  - ☐ Radio
  - ☐ Other (specify)

Fight the fire ONLY if:

- The Fire Department has been notified.
- The fire is small and is not spreading to other areas.
- Escaping the area is possible by backing up to the nearest exit.
- The fire extinguisher is in working condition and personnel are trained to use it.

Upon being notified about the fire emergency, occupants must:

- Leave the building using the designated escape routes.
- Assemble in the designated area (specify location):
- Remain outside until the competent authority (Designated Official or designee) announces that it is safe to reenter.

Designated Official, Emergency Coordinator or supervisors must (underline one):

- Disconnect utilities and equipment unless doing so jeopardizes his/her safety.
- Coordinate an orderly evacuation of personnel.
- Perform an accurate head count of personnel reported to the designated area.
- Determine a rescue method to locate missing personnel.
- Provide the Fire Department personnel with the necessary information about the facility.
- Perform assessment and coordinate weather forecast office emergency closing procedures

Area/Floor Monitors must:

- Ensure that all employees have evacuated the area/floor.
- Report any problems to the Emergency Coordinator at the assembly area.

Assistants to Physically Challenged should:

- Assist all physically challenged employees in emergency evacuation.

EXTENDED POWER LOSS

In the event of extended power loss to a facility certain precautionary measures should be taken depending on the geographical location and environment of the facility:

- Unnecessary electrical equipment and appliances should be turned off in the event that power restoration would surge causing damage to electronics and effecting sensitive equipment.
- Facilities with freezing temperatures should turn off and drain the following lines in the event of a long term power loss.
    - Fire sprinkler system
    - Standpipes
    - Potable water lines
    - Toilets
- Add propylene-glycol to drains to prevent traps from freezing
- Equipment that contain fluids that may freeze due to long term exposure to freezing temperatures should be moved to heated areas, drained of liquids, or provided with auxiliary heat sources.

Upon Restoration of heat and power:

- Electronic equipment should be brought up to ambient temperatures before energizing to prevent condensate from forming on circuitry.
- Fire and potable water piping should be checked for leaks from freeze damage after the heat has been restored to the facility and water turned back on.

CHEMICAL SPILL

The following are the locations of:

Spill Containment and Security Equipment: _____

Personal Protective Equipment (PPE):
MSDS:_____

When a Large Chemical Spill has occurred:
- Immediately notify the designated official and Emergency Coordinator.
- Contain the spill with available equipment (e.g., pads, booms, absorbent powder, etc.).

- Secure the area and alert other site personnel.
- Do not attempt to clean the spill unless trained to do so.
- Attend to injured personnel and call the medical emergency number, if required.
- Call a local spill cleanup company or the Fire Department (if arrangement has been made) to perform a large chemical (e.g., mercury) spill cleanup.

Name of Spill Cleanup Company:_____
Phone Number:_____

- Evacuate building as necessary

When a Small Chemical Spill has occurred:
- Notify the Emergency Coordinator and/or supervisor (select one).
- If toxic fumes are present, secure the area (with caution tapes or cones) to prevent other personnel from entering.
- Deal with the spill in accordance with the instructions described in the MSDS.
- Small spills must be handled in a safe manner, while wearing the proper PPE.
- Review the general spill cleanup procedures.

STRUCTURE CLIMBING/DESCENDING EMERGENCIES

List structures maintained by site personnel (tower, river gauge, etc.):

No.	Structure Type	Location (address, if applicable)	Emergency Response Organization* (if available within 30-minute response time)

Emergency Response Organization(s):

Name Phone Number_____

Name Phone Number_____
(Attach Emergency Response Agreement if available)

* - N/A. If no Emergency Response Organization available within 30-minute response time additional personnel trained in rescue operations and equipped with rescue kit must accompany the climber(s).

TELEPHONE BOMB THREAT CHECKLIST

INSTRUCTIONS: BE CALM, BE COURTEOUS. LISTEN. DO NOT INTERRUPT THE CALLER.
YOUR NAME: _____TIME: _____DATE: _____
CALLER'S IDENTITY
SEX: Male _____ Female ____ Adult ____ Juvenile ____ APPROXIMATE AGE: _____
ORIGIN OF CALL: Local _____ Long Distance _____ Cellphone _____

VOICE CHARACTERISTICS

___ Loud ___ Soft
___ High Pitch ___ Deep
___ Raspy ___ Pleasant
___ Intoxicated ___ Other

SPEECH

___ Fast ___ Slow
___ Distinct ___ Distorted
___ Stutter ___ Nasal
___ Slurred ___ Other

LANGUAGE

___ Excellent ___ Good
___ Fair ___ Poor
___ Foul ___ Other

ACCENT

___ Local ___ Not Local
___ Foreign ___ Region
___ Race

MANNER

___ Calm ___ Angry
___ Rational ___ Irrational
___ Coherent ___ Incoherent
___ Deliberate ___ Emotional
___ Righteous ___ Laughing

BACKGROUND NOISES

___ Factory ___ Trains
___ Machines ___ Animals
___ Music ___ Quiet
___ Office ___ Voices
___ Machines ___ Airplanes
___ Street ___ Party
___ Traffic ___ Atmosphere

BOMB FACTS

PRETEND DIFFICULTY HEARING - KEEP CALLER TALKING - IF CALLER SEEMS AGREEABLE TO FURTHER CONVERSATION, ASK QUESTIONS LIKE:

When will it go off? Certain Hour ____Time Remaining_____

Where is it located? Building Area

What kind of bomb? _____

What kind of package?_____

How do you know so much about the bomb?___

What is your name and address?

If building is occupied, inform caller that detonation could cause injury or death.

Activate malicious call trace: Hang up phone and do not answer another line. Choose same line and dial *57 (if your phone system has this capability). Listen for the confirmation announcement and hang up.

Call Security at _____ and relay information about call.

Did the caller appear familiar with plant or building (by his/her description of the bomb location)? Write out the message in its entirety and any other comments on a separate sheet of paper and attach to this checklist.
Notify your supervisor immediately.

SEVERE WEATHER AND NATURAL DISASTERS

Flood:
If indoors:
- Be ready to evacuate as directed by the Emergency Coordinator and/or the designated official.
- Follow the recommended primary or secondary evacuation routes.

If outdoors:
- Climb to high ground and stay there.
- Avoid walking or driving through flood water.
- If car stalls, abandon it immediately and climb to a higher ground.

Hurricane:
- The nature of a hurricane provides for more warning than other natural and weather disasters. A hurricane watch issued when a hurricane becomes a threat to a coastal area. A hurricane warning is issued when hurricane winds of 74 mph or higher, or a combination of dangerously high water and rough seas, are expected in the area within 24 hours.

Once a hurricane watch has been issued:

- Stay calm and await instructions from the Emergency Coordinator or the designated official.
- Moor any boats securely, or move to a safe place if time allows.
- Continue to monitor local TV and radio stations for instructions.
- Move early out of low-lying areas or from the coast, at the request of officials.
- If you are on high ground, away from the coast and plan to stay, secure the building, moving all loose items indoors and boarding up windows and openings.
- Collect drinking water in appropriate containers.

Once a hurricane warning has been issued:

- Be ready to evacuate as directed by the Emergency Coordinator and/or the designated official.
- Leave areas that might be affected by storm tide or stream flooding.

During a hurricane:

- Remain indoors and consider the following:
- Small interior rooms on the lowest floor and without windows,
- Hallways on the lowest floor away from doors and windows, and
- Rooms constructed with reinforced concrete, brick, or block with no windows.

Blizzard:

If indoors:

- Stay calm and await instructions from the Emergency Coordinator or the designated official.
- Stay indoors!
- If there is no heat:
- Close off unneeded rooms or areas.
- Stuff towels or rags in cracks under doors.
- Cover windows at night.
- Eat and drink. Food provides the body with energy and heat. Fluids prevent dehydration.
- Wear layers of loose-fitting, light-weight, warm clothing, if available.

If outdoors:

- Find a dry shelter. Cover all exposed parts of the body.
- If shelter is not available:
- Prepare a lean-to, wind break, or snow cave for protection from the wind.
- Build a fire for heat and to attract attention. Place rocks around the fire to absorb and reflect heat.
- Do not eat snow. It will lower your body temperature. Melt it first.

If stranded in a car or truck:

- Stay in the vehicle!
- Run the motor about ten minutes each hour. Open the windows a little for fresh air to avoid carbon monoxide poisoning. Make sure the exhaust pipe is not blocked.
- Make yourself visible to rescuers.
- Turn on the dome light at night when running the engine.
- Tie a colored cloth to your antenna or door.
- Raise the hood after the snow stops falling.
- Exercise to keep blood circulating and to keep warm.

CRITICAL OPERATIONS

During some emergency situations, it will be necessary for some specially assigned personnel to remain at the work areas to perform critical operations.

Assignments:

Work Area	Name	Job Title	Description of Assignment

- Personnel involved in critical operations may remain on the site upon the permission of the site designated official or Emergency Coordinator.
- In case emergency situation will not permit any of the personnel to remain at the facility, the designated official or other assigned personnel shall notify the appropriate _____ offices to initiate backups. This information can be obtained from the Emergency Evacuation Procedures included in the _____ Manual.

The following offices should be contacted:
Name/Location:_____
Telephone Number:_____

Name/Location:_____
Telephone Number:_____

Name/Location:_____
Telephone Number:_____

TRAINING
The following personnel have been trained to ensure a safe and orderly emergency evacuation of other employees:

Facility:

Name	Title	Responsibility	Date

Appendix 4 – Fire and Emergency Protection Plan

Fire and Emergency Protection Plan

For: Metro Environmental Ltd.
Facility: Argentia Access Road Industrial Composting Facility
Located: KM 4, Route 100, Argentia Access Road, Newfoundland

This document must be kept current by the building/business owner or authorized representative and placed near the primary entrance to the building for use by building/business personnel and for reference by Nelson Fire & Rescue Service.

FIRE & EMERGENCY CONTACTS

Whitbourne Fire Department - Telephone: (709) 759-3050

Norman's Cove Fire Department – Telephone: (709) 592-2833

Medical Emergency – 911
Facility Medical Response - St. John's General Hospital - Tel: 777 6300
Fire/Spill Emergency -- 911

Security & Police – 911
Whitbourne - RCMP: (709) 759-2600
Royal Newfoundland Constabulary: 729 8000

Occupational Health and Safety Branch
Department of Employment and Labor Relations
Industrial Accident: 729 4444
Poison Information Centre
St. John's: 722 1110

Workplace Health, Safety and Compensation Commission:
146-148 Forest Rd., P.O. Box 9000, St. John's, NL A1A 3B8
Tel: (709) 778-1000, Fax: (709) 738-1714
Toll Free: 1-800-563-9000

UTILITY COMPANY EMERGENCY CONTACTS

Newfoundland Power - Power Outages and Emergencies (24 hour service)
Telephone: 1-800-474-5711

EMERGENCY PROCEDURES TO BE USED IN CASE OF FIRE

When fire is discovered:

- Notify the local Fire Department.
- Notify the site personnel about the fire emergency by the following means:
    - Voice Communication
    - Cell Phone
    - Radio
    - Texting

Fight the fire ONLY if:

- The Fire Department has been notified.
- The fire is small and is not spreading to other areas.
- Escaping the area is possible by backing up to the nearest exit.
- The fire extinguishers and water hoses are in working condition and personnel are trained to use them.

Upon being notified about the fire emergency, occupants must:

- Leave the building using the designated escape routes.
- Assemble in the designated area: In front of administration building
- Remain outside until the competent authority (Designated Official or designee) announces that it is safe to reenter.

Designated Official, Emergency Coordinator or supervisors must:

- Disconnect utilities and equipment unless doing so jeopardizes his/her safety.
- Coordinate an orderly evacuation of personnel.
- Perform an accurate head count of personnel reported to the designated area.
- Determine a rescue method to locate missing personnel.
- Provide the Fire Department personnel with the necessary information about the facility.
- Perform assessment and coordinate weather forecast office emergency closing procedures.

Area/Floor Monitors must:

- Ensure that all employees and visitors have evacuated the area/floor.
- Report any problems to the Emergency Coordinator at the assembly area.

Assistants to Physically Challenged should:

- Assist all physically challenged employees in emergency evacuation.

FIRE PREVENTION

- Smoking allowed only in prescribed area;
- Practice good housekeeping in the buildings and yard throughout the facility;
- Hazardous products should also be stored in well-ventilated designated areas to reduce risk of fire.
- PRACTICE ELECTRICAL SAFETY: 'Electrical malfunctions' are a leading cause of fires. Wires should be enclosed in metal or PVC conduit (pipe) to protect them from exposure to weather and from mechanical damage from machinery and equipment. Keep combustibles away from heating appliances, and never leave them unattended. Regular cleaning of electrical appliances and equipment will prevent build-up of dirt and dust, which can contribute to overheating and malfunction. A regular maintenance cycle can also identify worn or defective parts, which can be repaired or replaced before they become a problem.
- KEEP YARD AREAS FREE OF BRUSH AND DEBRIS: Clear the immediate areas surrounding all barns and farm buildings by removing brush, debris and machinery. Remove weeds and trim/prune under trees and bushes. Keep grass along a roadway closely mowed (a motorist's stray cigarette could be a source for fire).
- REFUEL EQUIPMENT SAFELY: Refueling tractors and machinery should be done well away from buildings: so flammable vapours can dissipate. Always refuel equipment outdoors, away from open flames and sparks. Make sure engines or motors are turned off and cool before refueling.
- MAKE SURE EVERYONE FOLLOWS THE RULES: Ensure anyone visiting or working on the property learns and obeys the fire safety rules.

WILDFIRE PREVENTION

- Remove highly flammable vegetation from within at least 5 meters of buildings.
- Create noncombustible zones around spaces where equipment, fuel, waste wood or carbonaceous material and chemicals are stored.
- Create and maintain appropriate types and sizes of fire guards around facility perimeter.

FLAMMABLE AND COMBUSTIBLE MATERIALS

- Clearly mark and store flammable liquids in approved containers in well-ventilated areas away from heat, sparks, combustible materials and other potential ignition sources.
- Keep all ignition sources away from combustible materials. Do not store materials such as waste wood, carbonaceous materials, wood chips, peat or pesticides with machinery or near any type of electrical or heat source.
- Post and enforce "No Smoking" signs around hazardous or flammable material.
- Locate above-ground fuel tanks at least 10 meters away from buildings.
- When transferring flammable liquids from metal containers, bind the containers to each other and ground the one being dispensed from to prevent sparks from static electricity.
- Store hazardous products such as herbicides, insecticides, fungicides, and chemicals according to manufacturer's recommendations and applicable regulations.
- Clean up spills right away and keep oily rags in a tightly covered container.
- To prevent spontaneous combustion in compost piles, apply the proper moisture content and monitor daily.

- Do not allow grass silage to become too dry.
- Make certain upright silos do not have air leaks.
- Store compressed gases in upright cylinders away from heat sources and secure to a wall or buggy to prevent them from tipping over.

GENERAL FIRE SAFETY AND PREVENTION MEASURES

- Establish a security/safety sign-in / sign-out record and issue badges to visitors.
- Conduct fire drills at a 3 months frequency.

FIRE SAFETY AND FIREFIGHTING EQUIPMENT

According to the latest codes and standards currently in force, the buildings throughout the composting facility will be equipped with the following fire safety and firefighting equipment:

Building A – Administration Building

- Smoke alarms and emergency lighting;
- ABC Fire Extinguishers – Inspected and serviced annually.

Building B – Primary Composting and Receiving Building

- Smoke alarms and emergency lighting;
- Gas detection system
- ABC Fire Extinguishers – Inspected and serviced annually
- Service water hoses.

Building C – Composting Building

- Smoke alarms and emergency lighting;
- Gas detection system
- ABC Fire Extinguishers – Inspected and serviced annually
- Service water hoses.

Building D – Product Storage Building

- Smoke alarms and emergency lighting;
- Gas detection system
- ABC Fire Extinguishers – Inspected and serviced annually,
- Service water hoses.