



Innovative Development & Design Engineers Ltd.

Engineering Services I 3D Modelling

Anderson House,
42 Power's Court,
St. John's, NL A1A 1B6

Tel: (709) 368 8870
Cell: (709) 746 0571
Web: www.iddel.ca

Environmental Registration Document

Addendum

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

From:

Innovative Development & Design Engineers Ltd.
Anderson House, 42 Power's Court, St. John's, NL A1A 1B6

29 April 2016

Environmental Assessment Registration – Addendum 1 Industrial Composting Facility – Argentia Access Road, NL

In the publication of the Environmental Assessment documents by the Department of Environment and Conservation, the proposed industrial composting facility was initially planned to be located in Holyrood on Salmonier Line, and is now planned on the Argentia access road. And since the time of the first publication dating back in January 2016, the proponent has received a substantial number of serious enquiries from people and parties interested in using the services of the proposed composting facility. With this positive situation, the proponent has revised its approach to the design, construction and operation plan of the facility to better process the raw materials being considered with better certainty. The proponent is clearly committed to a completely controlled operating system, which will provide a better control on any environmental impact that the facility may have on the surrounds, as well as better productivity.

The proposed composting facility, to be located on the Argentia access road site proposed, will now entail the following facilities in addition to what is already identified and planned in the current Environmental Assessment document registered with the Department of Environment and Conservation:

- An indoor composting facility including a large building in dimensions of approximately 80 feet wide by 400 feet long.
- As the amounts of raw materials to be composted increase over time, additional buildings will be erected.
- Typical buildings for such purpose are shown below:



**Environmental Assessment Registration – Addendum 1
Industrial Composting Facility – Argentia Access Road, NL**



- Such buildings are built with foundations, concrete floor slabs, and access doors for persons and machinery, as well as lighting and ventilations systems controlled to suit the nature of the operations within the building.
- Such building facility will allow the proponent to operate 12 months a year with no environmental impact to the surrounds.
- Such building types are used commonly in North America in agriculture and waste management applications.
- Such fabric buildings can be commissioned very quickly, much faster than any other types of buildings.

With this approach, the proponent will be in the position to properly control the environmental impact of the composting operations:

- With engineered controls on ventilation, any odor problems will be totally eliminated.

**Environmental Assessment Registration – Addendum 1
Industrial Composting Facility – Argentia Access Road, NL**

- The building cover will prevent any issues with birds. Effective bird deterrents can be installed on the building roofs and superstructures.
- The confinement of the composting operations within the building will facilitate and provide complete control of vectors, vermin, and other such nuisance.
- The building facility will have an impervious concrete floor with throughing systems to collect any leachates from the operations. This leachates will be reintroduced in the process. There will be no external elimination of any leachates.
- As planned and documented in the current Environmental Assessment document, the facility will be set back sufficiently far from the main road to eliminate any negative environmental impacts to the public. There is already a mature forest screen from the road at the proposed location. The facility will not be seen from the road.
- All the composting will be done indoors, within the confine of the buildings.
- All the mixing and preparation of the compost raw material will be done within the confine of the buildings.
- All the raw material received on any given day will be mixed and prepared for composting the same day.
- The frequency of windrow turning will depend on the temperature and biological activity of the composting operations. Odors generated by these operations will be contained in the confines of the building.
- Sources of carbon for the composting operations will be from disposed lumber collected from transfer stations in the Eastern Waste Management Board areas (from Clarenville to St. John's). Wood will be chipped on site.
- In light of the substantial demand for industrial composting in eastern Newfoundland, Metro Environmental will not accept and process any sewage sludge. Whereas there are ready market demand for compost products, there is no market for processed sewage sludge.
- In some indoor or outdoor industrial composting facilities, it has been known that there may be a risk of spontaneous combustion in composting piles. This has been known to happen in warm and hot climates. Clearly, eastern Newfoundland is definitely not in a hot climate zone. This been said, Metro Environmental will have all the fire suppression systems in place to properly operate such a facility. The detailed design of such system will be done when the company is in the position to start the development and construction of the facility.

References of Existing Operating Industrial Composting Facilities in Atlantic Canada

It is important to note that such industrial composting facilities exist and operate all over Canada, and the other Atlantic province. These industrial composting facilities operate with no nuisance or hindrance to their surrounding neighbors and are simply located within urban industrial parks or in close proximity to residential properties. One such facility is located in Dartmouth, in an industrial park, next to the Caterpillar Dealership, in the Burnside Industrial Park.

There are 17 such facilities in Nova Scotia alone.

**Environmental Assessment Registration – Addendum 1
Industrial Composting Facility – Argentia Access Road, NL**

<https://www.novascotia.ca/nse/waste/facilities/facilities.organic.composting.php>

The above website link is from the Department of Environment – Nova Scotia. This site is a list of all of the 17 facilities in Nova Scotia and outlines the product they accept. It is important to note the Legend at the bottom of the site which outlines the products which they accept.

The IC&I sites are usually municipal and or private site that accept material from our Green Bin Pick up and they also accept fish, animal remanences and some accept Bio Soils.

It is an important website to look at as it is on a Government site and promoted by the province.

Spec Environmental Solutions Inc. – Nova Scotia

<http://www.specenviro.ca/home.php>

This composting facility takes in approximately 1.8 million mink carcasses as well as manure, mink waste feed, mink pelting plant waste, and fish waste which are processed by composting. The resulting compost is then used as a blend for topsoil or mixed with sand to make a compost mix. They also provide a link on their website to view a lab analysis report of their compost. The main contact is Hubert Leblanc and all of the companies contact information is below.

ADI Atlantic Inc. – Prince Edward Island

<http://www.adiatlantic.ca/projects/central-composting-facility>

The above link is for the only composting facility in PEI. It is a run by ADI for the province. They accept organic material - Green Bin material from houses, leave and yard waste and fish and lobsters.

This facility takes in the product, mixes them together and put in into Stainless Steel Containers and let it sit for a couple of weeks and then they move the material into a building where is sits in windrows to finish its curing process. The material is then screened and sold to farmers and the general public.