



APPROVAL TO OPERATE

I-12023

Pursuant to paragraph 8(1) of the *Water Quality Regulation - Clean Environment Act*, this Approval to Operate is hereby issued to:

Greater Moncton Wastewater Commission
for the operation of the
GMWC Composting Facility

Description of Source: **Biosolids Composting Facility**

Source Classification: **Fees for Industrial Approvals
Regulation - Clean Water Act** **Class 11**

Parcel Identifier: **01023159**

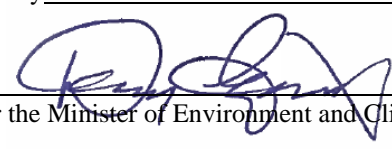
Mailing Address: **355 Hillsborough Road
Riverview, NB E1B 1S5**

Supersedes Approval: **I-9961**

Valid From: **April 15, 2023**

Valid To: **April 14, 2028**

Recommended by:  _____

Issued by:  _____
for the Minister of Environment and Climate Change

March 23, 2022
Date

SCHEDULE "A"

DEFINITIONS

"After Hours" means the hours when the *Department's* offices are closed. These include statutory holidays, weekends, and the hours before 8:15 a.m. and after 4:30 p.m. from Monday to Friday.

"Approval Holder" means the person or entity to whom the Approval is issued, as named on the certificate page (first page) of the Approval.

"Biosolids" means dewatered sewage sludge generated from the Greater Moncton Wastewater Commission.

"compost" means solid mature product resulting from composting.

"composting" means the managed process of bio-oxidation of a solid heterogeneous organic substrate including a thermophilic phase.

"Department" means the New Brunswick Department of Environment and Local Government.

"Environmental Emergency" means a situation where there has been or will be a release, discharge, or deposit of a contaminant or contaminants to the atmosphere, soil, surface water, and/or groundwater environments of such a magnitude or duration that it could cause significant harm to the environment or put the health of the public at risk.

"Facility" means the property, buildings, equipment, stockpiles, access roads and other components associated with the composting facility located on the property identified by the Parcel Identifier(s) on the certificate page (first page) of this Approval, and all contiguous property in the title and/or in the control of the *Approval Holder* at that location.

"Feedstock" means the material used in the composting process.

"Finished Material" means the finished compost and/or other processed materials.

"Hay" means hay from agricultural fields and farms.

"mature" means the term used to designate a compost that, when used as an organic soil conditioner, does not have phytotoxic effects arising from, for example, nitrogen immobilization or anaerobioses.

"Normal Business Hours" means the hours when the *Department's* offices are open. These include the period between 8:15 a.m. and 4:30 p.m. from Monday to Friday excluding statutory holidays.

"Organic Residue" means yard waste and crop residues.

"Peat Moss" means peat obtained from peat operations and/or bagged product.

"thermophilic phase" means the biological phase in the composting process characterized by the presence of micro-organisms which grow optimally in a temperature range of 45°C to 75°C.

"**statutory holiday**" means New Year's Day, Family Day, Good Friday, Easter Monday, the day fixed by proclamation of the Governor-in-council for the celebration of the birthday of the Sovereign (Victoria Day), Canada Day, New Brunswick Day, Labour Day, the day fixed by proclamation of the Governor-in-council as a general day of Thanksgiving, Remembrance Day, Christmas Day and Boxing Day. If the Statutory Holiday falls on a Sunday, the following day shall be considered as the Holiday.

"**Wood Waste**" means the sawdust, wood chips, shavings, and bark generated from wood mills in the Province of New Brunswick and untreated lumber that will be ground before use.

TERMS AND CONDITIONS

The Approval Holder shall operate the facility in accordance with the following:

EMERGENCY REPORTING

1. **Immediately** following the discovery of an environmental emergency, the *Approval Holder* shall notify the *Department* in the following manner.

During normal business hours, telephone the *Department's* applicable Regional Office **until personal contact is made** (i.e. no voice mail messages will be accepted) and provide as much information that is known about the *Environmental Emergency*. The telephone numbers for the *Department's* six Regional Offices are provided in the table below.

After hours, telephone **Environment and Climate Change Canada's National Environmental Emergencies Centre (NEEC) until personal contact is made** and provide all information known about the *Environmental Emergency*. The telephone number for the NEEC is **1-800-565-1633**.

Within 24-hours of the time of initial notification, a **Preliminary Emergency Report** shall be submitted to the *Department's* Central Office and applicable Regional Office using the contact information provided below. The Preliminary Emergency Report shall clearly communicate as much information that is available at the time about the *Environmental Emergency*.

Within five (5) days of the time of initial notification, a **Detailed Emergency Report** shall be submitted to the applicable Regional Office and to the *Department's* Central Office using the contact information provided below. The Detailed Emergency Report shall include, as minimum, the following: i) a description of the problem that occurred; ii) a description of the impact that occurred; iii) a description of what was done to minimize the impact; and iv) a description of what was done to prevent recurrence of the problem.

Office location	Phone	Email
Moncton Regional Office	(506) 856-2374	Elg.egl-region3@gnb.ca
Central Office	-	Approval Engineer

FACILITY MANAGEMENT

2. The *Approval Holder* shall ensure that odour, dust, and/or noise being released or discharged from the *Facility* does not cause adverse impacts to any off-site receptor. In the event impacts are suspected by the *Department* to be adversely impacting any off-site receptor, the *Approval Holder* may be required to investigate the degree of impact and/or develop, submit, and implement a Prevention and Control Plan in accordance with a timetable established by the *Department*. The plan shall be submitted in writing to the *Department* for review and approval prior to implementation.

3. The *Approval Holder* shall ensure that the *Facility* is secured in such a manner as to prevent unauthorized access.
4. The *Approval Holder* shall ensure that any operating problems, which could result in non-compliance with this Approval, are reported immediately to the *Department*.
5. The *Approval Holder* shall ensure that the *Facility* shall be used for the composting of *Wood Waste, Hay, Peat Moss, Biosolids, and Organic Residue*. No other materials may be composted at the *Facility* without first applying for and receiving approval, in writing, from the *Department*.
6. The *Approval Holder* shall ensure that no feedstock is imported from outside of New Brunswick for composting unless such a request is first registered and approved through the *Department's* Environmental Impact Assessment process.
7. The *Approval Holder* shall ensure that all materials that may drip liquid or release debris during transportation to the *Facility* are only accepted if contained in properly covered and sealed truck boxes and/or containers.
8. The *Approval Holder* shall ensure that all runoff generated from the *Facility* is contained within the *Facility* or treated by an approved method prior to release into the environment.
9. The *Approval Holder* shall ensure that the composting mix has the appropriate Carbon to Nitrogen (C/N) ratio for maximizing the composting process.
10. The *Approval Holder* shall ensure that the composting material is turned regularly to enhance the composting process and minimize odours and the presence of insects and other vermin.

TESTING AND MONITORING

11. The *Approval Holder* shall collect water samples at the groundwater and surface water monitoring locations indicated in Schedule D, if applicable. If groundwater and/or surface water sampling is required, the *Approval Holder* shall ensure that samples are collected by a qualified technician.
12. The *Approval Holder* shall test all *Finished Material* for the parameters listed in Schedule C. This testing shall be done in accordance with the procedure outlined in the most recent version of the Canadian Council of the Ministers of the Environment (CCME) "Guidelines for Compost Quality".
13. The *Approval Holder* shall ensure that all parameters that are required to be analyzed by this Approval are analyzed by accredited laboratories whose accreditation includes the analytical method used to make the determination.

LIMITS

14. The *Approval Holder* shall ensure that all finished material meet the limits described in Schedule C.
15. The *Approval Holder* shall ensure that all *Finished Material* that does not meet the standards described in Schedule C is disposed of at an approved sanitary landfill or recycled back into the composting process. This material is not permitted to be offered for retail sale or other use.
16. The *Approval Holder* shall ensure that no *Finished Material* is offered for retail sale and/or other use, without written confirmation from the *Department*. The "Confirmation Statement" form must be submitted to the *Department* with the test results.

REPORTING

17. **Within 30 days** of receiving the results of the testing described in the Testing and Monitoring section of this Approval, the Approval Holder shall submit the test results to the Department. The most recent test results shall be presented in a tabular form including the results from the previous two years. The tabular form shall contain at a minimum the following information: the location (longitude and latitude) of the sampling, the date of sampling, the testing parameters, and laboratory results.
18. **Prior to January 30 of each year**, the *Approval Holder* shall submit a compost material inventory to the *Department*. This inventory shall include the quantity in cubic meters of: a) all the compost feedstock that entered the *Facility* during the previous calendar year; b) the *Finished Material* that exited the *Facility* during the previous calendar year, and c) the total of the material that remained at the *Facility* at the end of the previous calendar year.

SCHEDULE C**TERMS AND CONDITIONS - LIMITS**

CRITERIA FOR FINISHED MATERIAL SAFETY		
Trace Elements		Maximum Concentration within Finished Material (mg/kg dry weight)
	Arsenic	13
	Cobalt	34
	Chromium	210
	Copper	400
	Molybdenum	5
	Nickel	62
	Selenium	2
	Zinc	700
	Cadmium	3
	Mercury	0.8
	Lead	150
Sharp Foreign Matter	The Finished Material shall not contain any sharp foreign matter of dimension greater than 3mm per 500ml.	
Other Foreign Matter	The Finished Material shall not contain no more than one (1) piece of foreign matter greater than 25mm in any dimension per 500ml.	
Maturity/Stability of Finished Material	The Finished Material shall be cured for a minimum of 21 days and meet one of the following three requirements: (a) the respiration rate is less than, or equal to, 400 mg of oxygen/kg of volatile solids per hour, (b) the carbon dioxide evolution rate is less than, or equal to, 4 mg of carbon in the form of carbon dioxide per gram of organic matter per day, or (c) the temperature rise of the compost above ambient temperature is less than 8°C.	
Pathogens in Finished Material	The Finished Material shall meet the following criteria: (a) Fecal Coliform less than 1000 MPN/g of total solids calculated on a dry weight basis, or (b) Salmonella sp. less than 3 MPN/4g total solids calculated on a dry weight basis.	

SCHEDULE D

The Approval Holder shall operate the Facility in accordance with the following:

TERMS AND CONDITIONS - TESTING AND MONITORING

1. The *Approval Holder* shall ensure that the six (6) monitoring wells (as shown in Figure 4.1 "location of boreholes/monitoring wells" attached in the report entitled "Environmental Evaluation Greater Moncton Sewerage Commission Composting *Facility* Moncton, N.B." submitted in December 2003 by AMEC Earth & Environmental Limited) shall be sampled and analyzed during May for General Chemistry, faecal coliform, and E-coli.

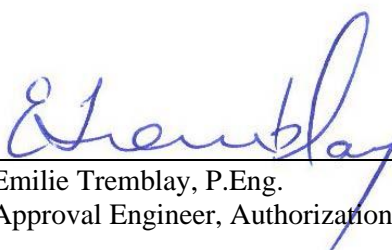
Groundwater Samples:

Location(s)	Parameters	Frequency
See Groundwater Monitoring Report for Coordinates of each well in the Groundwater Monitoring Network.	General Chemistry, faecal coliform, and E-coli	Annually (in May of every year)

For the purpose of this Approval "General Chemistry" shall include the following parameters:

Alkalinity	Hardness (as CaCO ₃)	Potassium	BOD
Ammonia	Iron	Silica	COD
Calcium	Magnesium	Sodium	Kjeldahl Nitrogen
Chloride	Manganese	Sulphate	Total Phosphorus
Conductivity	Nitrate-Nitrite (NO _x)	Total Organic Carbon	Total Dissolved Solids
Copper	pH	Turbidity	Total Suspended Solids
Cyanide	Phosphate	Zinc	

Prepared by:


Emilie Tremblay, P.Eng.
Approval Engineer, Authorizations Branch