

APPROVAL TO OPERATE

I-10032

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

McLaughlin Soil Management Facility Ltd. for the operation of the Kelly Road Composting Facility

| Description of Source: | Composting Facility |
|-----------------------------|---|
| Source Classification: | Fees for Industrial Approvals Regulation - Clean Water Act |
| Parcel Identifier: | 65214280 |
| Mailing Address: | 304 Kelly Road Grand Falls, NB E3Z 1K3 |
| Conditions of Approval: | See attached Schedules "A", "B", "C" and "D" of this Approval |
| Supersedes Approval: | I-8300 |
| Valid From: | March 15, 2018 |
| Valid To: | March 14, 2023 |
| Recommended by: Matthew Te | uem. |
| Issued by: | February 14, 2018 |

Date

for the Minister of Environment and Local Government

SCHEDULE "A"

GENERAL INFORMATION

APPLICABILITY

This standard applies to all Class 12 and Class 13 composting facilities operating in New Brunswick and may be cited as the "Sector Standard for Composting".

DEFINITIONS

- "Approval Holder" means the person or entity to whom the Approval is issued, as named on the certificate page (first page) of the Approval.
- "Department" means the New Brunswick Department of Environment and Local Government.
- "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 control of the Approval Holder at that location.
- "Finished material" means the finished compost and/or other processed materials.
- "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.
- "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.
- "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.
- "statutory holiday" means New Years 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.
- "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.

"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.

"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.

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

TERMS AND CONDITIONS - EMERGECNY REPORTING

1a. 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, and during normal business hours when personal contact is not possible, telephone the Canadian Coast Guard **until personal contact is made** and provide as much information that is known about the environmental emergency. The telephone number for the **Canadian Coast Guard** is **1-800-565-1633**.

1b. Within 24-hours of the time of initial notification, a **Preliminary Emergency Report** shall be faxed by the Approval Holder to the Department's applicable Regional Office using the fax numbers 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 faxed by the Approval Holder to the Department's applicable Regional Office using the fax numbers 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 | Fax |
|------------------------------------|----------------|----------------|
| Bathurst Regional Office | (506) 547-2092 | (506) 547-7655 |
| Fredericton Regional Office | (506) 444-5149 | (506) 453-2893 |
| Grand Falls Regional Office | (506) 473-7744 | (506) 475-2510 |
| Miramichi Regional Office | (506) 778-6032 | (506) 778-6796 |
| Moncton Regional Office | (506) 856-2374 | (506) 856-2370 |
| Saint John Regional Office | (506) 658-2558 | (506) 658-3046 |

TERMS AND CONDITIONS - OPERATING CONDITIONS

- 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 comply with the most recent version of the Department's Guidelines for the Site Selection, Operation and Approval of Composting Facilities in New Brunswick.
- 4. The Approval Holder shall ensure that the Facility is secured in such a manner as to prevent unauthorized access.
- 5. The Approval Holder shall ensure that any operating problems, which could result in non-compliance with this Approval, are reported immediately to the Department.
- 6. The Approval Holder shall ensure that the Facility is used for the composting of feedstocks listed in Schedule B. No other feedstock shall be used in composting at the facility without first applying for and receiving approval, in writing from the Department.
- 7. 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.
- 8. The Approval Holder shall ensure that all materials that may drip liquid or release debris during transportation to the Facility shall only be accepted if contained in properly covered and sealed truck boxes and/or containers.
- 9. 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.

- 10. The Approval Holder shall ensure that the composting mix has the appropriate Carbon to Nitrogen (C/N) ratio for maximizing the composting process.
- 11. 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.

TERMS AND CONDITIONS - TESTING AND MONITORING

- 12. 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.
- 13. 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 CCME "Guidelines for Compost Quality".
- 14. 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.

TERMS AND CONDITIONS - LIMITS

- 15. The Approval Holder shall ensure that all finished material meet the limits described in Schedule C.
- 16. The Approval Holder shall ensure that all finished material that does not meet the limits 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.
- 17. 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 applicable Regional Office with the test results.

TERMS AND CONDITIONS - REPORTING

18. 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.

19. 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 "B"

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

DEFINITIONS

"Wood waste" means the wood-yard scrapings, sawdust, chips, fines, etc. used in the composting process.

"Bark" means the bark from the wet/dry debarkers, hot-ponds, and chippers used in the composting process.

"Paper mill residue" means the carbon fibre, clay-fibre, mill biosolids, primary and secondary fibre used in the composting process.

"Livestock residue" means animal manures, including poultry manure bedding, used in the composting process.

TERMS AND CONDITIONS - FEEDSTOCK REQUIREMENTS

1. The Approval Holder is only permitted to compost the following feedstocks:

| Feedstock | Maximum Volume of Unmixed Feedstock Stored at the Facility (Cubic Meters) |
|--------------------|---|
| Wood waste | 1000 m ³ |
| Bark | 1000 m ³ |
| Paper mill residue | 1000 m ³ |
| Livestock residue | 1000 m ³ |

SCHEDULE "C"

TERMS AND CONDITIONS - LIMITS

| CRIT | CRITERIA FOR FINISHED MATERIAL SAFETY | | |
|-----------------------|---|------------------------------------|--|
| | | Maximum Concentration within | |
| | | Finished Material (mg/kg dry | |
| | | weight) | |
| | Arsenic | 13 | |
| | Cobalt | 34 | |
| | Chromium | 210 | |
| | Copper | 400 | |
| | Molybdenum | 5 | |
| Trace Elements | Nickel | 62 | |
| | Selenium | 2 | |
| | Zinc | 700 | |
| | Cadmium | 3 | |
| | Mercury | 0.8 | |
| | Lead | 150 | |
| Sharp Foreign Matter | The Finished Material shall not co | ontain any sharp foreign matter of | |
| | dimension greater than 3 mm per 500 ml. | | |
| Other Foreign Matter | The Finished Material shall contain no more than one (1) piece of | | |
| | foreign matter greater than 25 mm in any dimension per 500 ml. | | |
| | 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 solid | | |
| Maturity/Stability of | (b) the carbon dioxide evolution rate is less than, or equal to, 4 | | |
| Finished Material | 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. | | |
| | The Finished Material shall meet t | | |
| | (a) Fecal Coliform less than 1000 MPN/g of total solids | | |
| Pathogens in Finished | calculated on a dry weight basis, or (b) Salmonella sp. less than 3 MPN/4g total solids calculated on | | |
| Material | | | |
| | 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 collect surface water samples as follows:

Surface Water Samples:

| Location(s) | Parameters | Frequency |
|-----------------|-----------------------------|--------------------------|
| Discharge Ponds | Faecal Coliforms, Total | Monthly - May, July, and |
| | Coliforms, E. Coli, SS, and | September |
| | CBOD ₅ | 1807 |

Prepared by:

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Approval Coordinator, Authorizations Branch

#M4924
Mark L. Glynn

February 14, 2018

Mark L. Mouneau Branch B

Reviewed by:

Mark Glynn, P.Eng. Manager, Permitting South Authorizations Branch