

GOVERNMENT OF

NEWFOUNDLAND AND LABRADOR

Department of Environment, Climate Change and Municipalities

CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL2002, Sections 16, 78 and 83.

Issued: Expiration: November 1, 2020

November 1, 2025

Approval No.:

WMS-15-10-013

File No.:

842.037.6

Proponent:

10643 Newfoundland Inc. (De-Watering Technologies)

P.O. Box 16101, Sta Foxtrap Conception Bay South, NL

A1X 2E2

Attention:

Mr. Derek Pardy (Principal)

Mr. Steve Moores (Operations Manager)

Re: Sewage Sludge Dewatering, In-Vessel Composting and Wastewater Treatment Plant (Foxtrap)

Approval is hereby given for operation of a waste management system consisting of: a) the sewage sludge/septic waste storage and dewatering facility at Foxtrap, b) composting of bio-solids via an in-vessel composter, and c) a wastewater treatment plant.

This approval does not release the holder from the obligation to obtain appropriate approvals from other concerned provincial, federal, and municipal agencies. Approval from the Department of Environment, Climate Change and Municipalities (the Department) shall be obtained prior to any significant change in the design, construction, installation, or operation of the facility, including any future expansion of the works. This certificate shall not be sold, assigned, transferred, leased, mortgaged, sublet, or otherwise alienated by the holder without obtaining written prior approval from the Minister.

This approval is subject to the terms and conditions attached hereto, as may be revised from time to time by the Department. The terms and conditions form part and parcel of this certificate of approval. Failure to comply with any of the terms and conditions may render this certificate of approval null and void, may require the proponent to cease all activities associated with this certificate of approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, SNL., 2002, c. E-14-2, and will make the proponent responsible for taking such remedial measures as may be prescribed by the Department. The Department reserves the right to add, modify, or revoke this approval at any time.

MINISTER

General

1. Prior to the expansion or modification of the waste management system, a letter of application shall be forwarded to the Department requesting an amendment to this approval.

Foxtrap Operations

- 2. Approval is given for the continued operation of the sewage and septic waste treatment facility and SEPTEC sewage sludge centrifuge at Incinerator Road, Foxtrap, Newfoundland. 10643 Newfoundland Inc. is responsible for this activity.
- 3. Approval is given for the operation of an in-vessel composter for composting bio-solids.
- 4. Approval is given for the operation of a wastewater treatment plant at Incinerator Road (former Rothsay Rendering Facility).

Definitions

- 5. In this Certificate of Approval:
 - adverse effect means an effect that impairs or damages the environment and includes an adverse effect to the health of humans;
 - CCME means Canadian Council of Ministers of the Environment;
 - CESQG means CCME Canadian Environmental Soil Quality Guidelines;
 - contaminant means, unless otherwise defined in the regulations, a substance that causes or may cause an adverse effect;
 - Department means the Department of Environment, Climate Change and Municipalities;
 - Director means the Director of the Pollution Prevention Division of the Department;
 - glycol means glycol that, through use, storage or handling, can no longer be used for its original purpose;
 - Pardy's means either Pardy's Holdings Limited, Pardy's Waste Management and Industrial Services Limited; or 10643 Newfoundland Inc.;
 - QA/QC means Quality Assurance/Quality Control;
 - Regional Director means the Director of the nearest Service NL regional office;
 - sludge means muddy or slushy mass, deposit, or sediment;
 - solid means firm and stable in shape (not liquid or fluid);
 - TPH means total petroleum hydrocarbons as measured by the Atlantic PIRI method;
 - TSS means total suspended solids;
 - **used lubricating oil** means lubricating oil that as a result of its use, storage or handling, is altered so that it is no longer suitable for its intended purpose, but is suitable for refining or other permitted uses;
 - used oil means oil that, through use, storage and handling, can no longer be used

- for its original purpose;
- waste oil means an oil that as a result of contamination by any means including waste drilling muds, or by its use, is altered so that it is no longer suitable for its intended purpose;
- wastewater means water that has been used (as in a manufacturing process).

Application Submission

- 6. The following submissions have been received by the Department to support this request for a Certificate of Approval:
 - A formal request via email requesting a Certificate of Approval for the continued operation of a waste management system consisting of: a) sewage sludge dewatering,
 b) in-vessel composting, and c) a wastewater treatment plant located in Foxtrap;
 - A Continuation Certificate and Endorsement issued by **intact Insurance** for a surety bond in the amount of \$40,000 (bond No. 9600 12508);
 - A Certificate of Liability Insurance issued by Steers Insurance Limited for Environmental Impairment coverage in the amount of \$5,000,000 (policy No. SUM-CGL-12892-003);
 - A Certificate of Insurance issued by The Dominion of Canada General Insurance Company for Automobile Liability coverage in the amount of \$5,000,000 (policy No. ABL8371510);
 - An Environmental Management Plan (document No. PWM-MAN-004) dated February 2020;
 - An Emergency Response Reporting Safe Work Procedure (document No. PWM-SWP-011) dated March 2020;
 - A Chemical of Fuel Spills Safe Work Procedure (document No. PWM-SWP-015) dated March 2020; and
 - A Spill Response Contingency Plan Safe Work Procedure (document No. PWM-SWP-037) dated March 2020.

Emergency Preparedness

- 7. Pardy's shall maintain an environmental emergency and contingency plan and submit a current copy and annual updates for review and approval by the Department by January 31 of the following year.
- 8. Pardy's shall ensure that this approval, or a copy, is kept on site at all times and that personnel directly involved in the operation of the wastewater treatment system are made fully aware of the terms and conditions which pertain to this approval.
- 9. All responsible personnel who are directly involved with the operation and maintenance of the processing system shall be provided copies of this approval.
- 10. For after-hours emergencies and spill reporting call: 1-800-563-9089 or (709) 772-2083.

- 11. All appropriate health and safety procedures shall be constantly maintained at the site in accordance with applicable legislation.
- 12. Pre-engineered treatment system(s) shall be operated and maintained in accordance with the manufacturer's operating and maintenance specifications and health and safety plan.
- 13. The operator(s) shall have petroleum fire and spill response training.
- 14. The Minister may at any time, with reasonable notice, require the proponent to conduct or have conducted environmental studies, site assessments, sampling, testing, or investigations where, based upon reasonable and probable grounds, the Minister is of the opinion that this waste management system may have had, or has the potential to have, an adverse effect on the environment.

Digital Government and Service NL

15. Through a Memorandum-of-Understanding this Department has authorized the department of Digital Government and Service NL to act on its behalf in inspecting and/or auditing this operation for compliance under this approval and all applicable provincial Acts and Regulations.

Legislation

- 16. The activities associated with this operation may involve, but not be limited to, the following provincial Acts and Regulations, polices, guidelines and their successors:
 - Dangerous Goods Transportation Act;
 - Fire Prevention Act, 1999;
 - Environmental Protection Act, 2004;
 - Air Pollution Control Regulation, 2004;
 - Halocarbon Regulations, 2005;
 - Storage and Handling of Gasoline and Associated Products Regulations, 2003;
 - Used Oil and Used Glycol Control Regulations, 2018;
 - Water Resources Act, 2002;
 - Environmental Control Water and Sewage Regulations, 2003;
 - GD-PPD-066 Sampling of Water and Wastewater Industrial Effluent Applications;
 - Accredited Laboratory Policy PD:PP2001-01.2 updated Feb, 2011;
 - Effluent Discharge Schedule Determination Policy for Industries PD:PP2013-01.
- 17. The activities associated with this operation may involve, but not be limited to, the following federal Acts and Regulations and their successors:
 - Canadian Environmental Protection Act, 1999 and Regulations;
 - Interprovincial Movement of Hazardous Waste and Hazardous Recyclable Materials Regulations;

- Export and Import of Hazardous Waste and Hazardous Recyclable Materials Regulations;
- CCME Canadian Environmental Soil Quality Guidelines
- CCME Guidelines for Compost Quality
- Transportation of Dangerous Goods Act and Regulations
- Fisheries Act
- National Fire Code

Financial Assurance

- 18. Valid environmental liability impairment insurance in the minimum amount of \$1,000,000 shall be maintained otherwise this approval is null and void.
- 19. A surety bond of \$20,000 shall be on file with the Department, otherwise this approval shall be null and void.
- 20. Annual updates of the financial assurance documents shall be filed with the Department.
- 21. Pardy's shall provide the Department with three months advance notice if they intend to cancel coverage and/or change the insurer or bonding agent.

Air Emissions

22. The proponent shall comply with the Air Pollution Control Regulations, 2004 at all times. Schedule E of the regulations prohibits the open burning of tire; plastics; treated lumber; asphalt; asphalt products; drywall; demolition waste; hazardous waste; biomedical waste; domestic waste; trash, garbage, or other waste from commercial, industrial or municipal operations; manure; rubber; tar paper; railway ties; paint and paint products; fuel and lubricant containers; used oil; animal cadavers; hazardous substances; materials disposed of as part of the removal of decontamination of equipment, buildings or other structures.

Spill Prevention

23. Areas in which chemicals are used or stored shall have impermeable floors and dykes or curbs and shall not have a floor drain system, nor shall it discharge to the environment. Areas inside the dykes or curbs shall have an effective secondary containment capacity of at least 110% of the chemical storage tank capacity, in the case of a single storage container. If there is more than one storage container, the dyked area shall be able to retain no less than 110% the capacity of the largest container or 100% of the capacity of the largest container plus 10% of the aggregate capacity of all additional containers, whichever is greater. These dyked areas shall be kept clear of material that may compromise the capacity of the dyke system. Once a year, the dykes shall be visually inspected for their liquid containing integrity, and repairs shall be made when required. Once every ten years, the dykes shall be inspected, be a means other than visual inspection, for their liquid containing integrity, and repairs shall be made when required.

Oily Water and Used Oil Holding Tanks

24. Oily water and waste oil holding tanks shall be approved by the department of Digital Government and Service NL as per the *Used Oil and Used Glycol Control Regulations*.

SEPTIC Performance

- 25. Neither the Department nor Digital Government and Service NL has conducted or required any performance testing to confirm claims of the proponent and/or the manufacturer. The issuance of this approval is not to be interpreted as certification of the SEPTIC unit.
- 26. The SEPTIC centrifuge treatment unit is approved to process human sewage waste (liquids, solids, and semi-solids) only. No other types of contaminated materials, liquids, solids, or semi-solids, are approved for processing.
- 27. A heating system for the storage tank system shall be maintained to prevent freezing of the contents of the tanks and lines and all other components of the SEPTIC system. Where heating systems are not available the system shall be purged of all contents at the end of each day between November 1st and April 1st of each year.
- 28. All connections, couplings, hoses, lines, tanks, sumps, machinery, pumps, and all other components of the SEPTIC treatment unit including all other associated equipment shall be liquid tight. In the event of a leak or spill the necessary repairs are to be made immediately.

Acceptable Sludge

- 29. Pardy's shall not store on site or process excrement of any type other than that which is human in origin.
- 30. All human sewage waste delivered to the site shall be processed by the SEPTIC unit.
- 31. Liquid effluent (decant water) generated by the SEPTIC unit shall be discharged at the approved rate and volume into the on-site subsurface sewage disposal system and not discharged into any municipal sewage system.
- 32. Any importation of sewage sludge from outside the Province requires approval in advance by the Department. This does not include airport, seaport, or bus terminal generated wastes.
- 33. All dewatered sludge stored or treated on site shall be placed on an impermeable surface (permeability <10⁻⁷cm/sec), or placed in sealed containers. Acceptable materials for the impermeable surface include synthetic liners, asphalt, or concrete. Naturally occurring or imported compacted soil is not considered acceptable for use as an impermeable surface regardless of its permeability. The impermeable surface shall be designed to collect and direct liquids into the approved sewage containment or disposal system.

Composting

- 34. Approval is given for the composting of bio-solids via in-vessel composter located at Incinerator Road, Foxtrap, Conception Bay South.
- 35. Prior to compost being moved from the site it must be tested to ensure that it meets Class B of the CCME Compost Quality Guidelines. If compost does not meet Class B of the CCME Compost Quality Guidelines it must be disposed of at an approved waste disposal facility, with permission of the operator of the waste disposal site.
- 36. Prior to moving the bio-solid compost, a written proposal shall be submitted to the Department for approval.

Effluent Monitoring and Discharge

- 37. Only effluent generated at the septic treatment facilities specified in this approval shall be held in holdings tanks, directed through the wastewater treatment plant, and discharged into Nut Pond.
- 38. Pardy's shall perform an Effluent Monitoring Program as per **Table 1**. The applicable limits for the effluent are listed in **Table 2**. All analytical results shall be submitted to the Director as per the *Reporting* section.
- 39. Discharge of untreated septic/septic supernatant into a municipal sewer system is not permitted.

Table 1 - Effluent Monitoring Program				
Location	EDMS Location Code	Parameters	Frequency	
Wastewater Treatment Plant	00511	EDC	Weekly Grab Sample if Outflow	

Table 2 - Effluent Discharge Criteria (EDC)		
Parameter	Allowable Limits *	
Ammonia	2.0	
Arsenic	0.5	
Barium	5.0	
Boron	5.0	
Cadmium	0.05	
Chromium	1.0	
Copper	0.3	
Iron	10.0	
Lead	0.2	
Mercury	0.005	
Nickel	0.5	

Selenium	0.01	
Silver	0.05	
Zinc	0.5	
рН	5.5 – 9.0 pH Units	
Phenol	0,1	
BOD ₅	20.0	
Nitrate	10	
Total Phosphates (as P ₂ O ₅)	1.0	
TSS	30.0	
TDS	1000	
ТРН	15	
Fecal Coliform	10 MPN/ml	
Total Coliform	50 MPN/ml	
All units are expressed in mg/L unless of	therwise stated.	

Water Chemistry Analysis

40. **Pardy's** shall perform a water Chemistry Analysis Program four times per year at least 30 days apart as per **Table 3**. All results shall be submitted to the Director as per the *Reporting* section.

Location	EDMS Code	Parameters 19 19 19	
Wastewater Treatment	00511	General Parameters: temperature, dissolved oxygen (DO), nitrate + nitrite, nitrate, nitrite, pH, TSS, colour, sodium, potassium, calcium, sulphide, magnesium, ammonia, alkalinity, sulphate, chloride, fluoride, turbidity, reactive silica, orthophosphate, phosphorous, DOC, conductance, TDS (calculated), phenol, carbonate (CaCO ₃), hardness (CaCO ₃), bicarbonate (CaCO ₃), cyanide, TPH Metals Scan: aluminium, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, mercury, nickel, selenium, silver, strontium, thallium, tin, titanium, uranium, vanadium, zinc	
Raw Water	00512		
Nut Pond	00760		

Laboratory Analysis & QA/QC

41. Unless otherwise stated herein, all solids and liquids analysis performed pursuant to this Approval shall be done by either a contracted commercial laboratory or an in-house laboratory. Contracted commercial laboratories shall have a recognized form of accreditation. In-house laboratories have the option of either obtaining accreditation or submitting to an annual inspection by a representative of the Department, for which Pardy's shall be billed for each laboratory inspection in accordance with Schedule 1 of the Accredited Laboratory Policy (PD:PP2001-01.2). Recommendations of the Director

- stemming from the annual inspections shall be addressed within 6 months; otherwise further analytical results shall not be accepted by the Director.
- 42. If **Pardy's** wishes to perform in-house laboratory testing and submit to an annual inspection by the Department then a recognized form of proficiency testing recognition shall be obtained for compliance parameters for which this recognition exists. The compliance parameters are listed in the *Effluent Monitoring and Discharge* section. If using a commercial laboratory, **Pardy's** shall contact that commercial laboratory to determine and to implement the sampling and transportation QA/QC requirements for those activities.
- 43. The exact location of each sampling point shall remain consistent over the life of the monitoring programs, unless otherwise approved by the Director. Using a GPS or similar device, the northing and easting of each sampling location shall be recorded and submitted by *April 30, 2021* to the Department.
- 44. **Pardy's** shall bear all expenses incurred in carrying out the environmental monitoring and analysis required under conditions of this Approval.

Environmental Effect Study

- 45. **Pardy's** shall engage a qualified professional to conduct a study (hereinafter called "the Study") to assess the potential environmental effects resulting from the release of effluent from their wastewater treatment plant on the receiving environment.
- 46. The Study shall:
 - review the effluent released from the wastewater treatment plant;
 - recommend a site specific water quality sampling program for the freshwater aquatic receiving environment; and
 - make site specific recommendations for focused areas of effluent quality improvements at the wastewater treatment plant.
- 47. The final report on the Study, including all conclusions and recommendations, shall be submitted to the Minister by **April 30, 2021**.
- 48. Water quality sampling in the freshwater aquatic receiving environment shall commence by May 31, 2021 and results will be provided to the Minister as per the *Reporting* section. The water quality sampling program will take into consideration the recommendations in the Study and will be finalized by the Minister following the Study submission. The Minister may require additional monitoring not included in the Study to satisfy Departmental requirements.
- 49. Recommendations for focused areas of effluent quality improvement identified in the Study will be considered for action by **Pardy's** and the Minister.

Monitoring Alteration

- 50. The Director has the authority to alter monitoring programs or require additional testing at any time when:
 - pollutants might be released to the surrounding environment without being detected;
 - an adverse environmental effect may occur; or
 - it is no longer necessary to maintain the current frequency of sampling and/or the monitoring of parameters.
- 51. **Pardy's** may, at any time, request that the monitoring program or requirements of this approval be altered by:
 - requesting the change in writing to the Director; and
 - providing sufficient justification, as determined by the Director.
- 52. The requirements of this Approval shall remain in effect until altered, in writing, by the director.

Reporting

- 53. An annual report shall be submitted to the Department by January 31st, each year summarizing Pardy's activities the previous year. Also, this report shall include the current insurance and bonding documents as specified in the *Emergency Preparedness* and *Financial Assurance* sections and any updates to the *Contingency Plan*.
- 54. Monthly reports containing the environmental compliance monitoring and sampling information required in this Approval shall be received by the Director in digital format within 30 calendar days of the reporting month. All related laboratory reports shall be submitted with the monthly report in XML format and Adobe Portable Document Format (PDF). Digital report submissions shall be uploaded through the EDMS web portal. The Pollution Prevention Division shall provide details of the portal web address and submission requirements.
- 55. Each monthly report shall include a summary of all environmental monitoring components and shall include an explanation for the omission of any requisite data. The Monthly summary reports shall be in Microsoft Words or Adobe PDF format and shall be uploaded through the EDMS web portal with the data submissions.
- 56. All incidents of:
 - contingency plan implementation;
 - non-conformance of any condition within this approval;
 - spillage or leakage of a regulated substance;
 - discharge criteria being, or is suspected of being, exceeded; or
 - verbal or written complaints of an environmental nature received from the public by **Pardy's** and related to the facility, including complaints submitted anonymously;

shall be immediately reported, within one working day, to a person or message manager or facsimile machine at Digital Government and Service NL by phoning or faxing or via email.

Digital Government and Service NL (St. John's) P.O. Box 8700 A1B 4J6

Telephone: (709) 729-3699 Facsimile: (709) 729-3980

- 57. A written report including a detailed description of the incident, summary of contributing factors and an action plan to prevent future incidents of a similar nature, shall be submitted to the respective Regional Director. The Action plan shall include a description of actions already taken and future actions to be implemented, and shall be submitted within thirty days of the date of the initial incident.
- 58. Any spillage or leakage of gasoline or associated product shall be reported immediately through the Canadian Coast Guard at 1-800-563-9089 or (709) 772-2083.

Expiration

59. This approval expires on **November 1, 2025**. Should the proponent wish to continue to operate beyond this expiry date, a written request shall be submitted to the Department for the renewal of this Approval. Such request shall be made **2 months prior** to expiration.

c.c. Robert Locke, Director Pollution Prevention Division Department of Environment, Climate Change and Municipalities rolocke@gov.nl.ca

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