

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Municipal Affairs and Environment

CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL 2002 c E-14.2 Section 83

Issue Date: January 3, 2018

Approval No. WMS17-12-001

Expiration: January 3, 2020

File No. 839-EVG-001

Proponent:

Enviro Green Septic Plumbing Ltd.

141 Carolina Ave.

Stephenville, Newfoundland

A2N 2S5

Attention:

Shawn Boyd, Owner

Re:

Approval to construct a septage treatment facility in Stephenville

Approval is hereby given for: the construction/installation of Enviro Green Septage Treatment Facility in Stephenville, NL. The treatment facility is an ABYDOZ wetland sewage treatment system consisting of a septage receiving station, three sludge treatment beds, and an engineered wetland.

This Certificate of Approval (Approval) does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Nothing in this Approval negates any regulatory requirement placed on the proponent. Where there is a conflict between conditions in this Approval and a regulation, the condition in the regulation shall take precedence. Approval from the Department of Municipal Affairs and Environment (the Department) shall be obtained prior to any significant change in the design, construction, installation, or operation of the Enviro Green Septage Treatment Facility, including any future expansion of the Enviro Green Septage Treatment Facility. This Approval shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the proponent without obtaining prior approval from the Minister.

This Approval is subject to the terms and conditions as contained therein, as may be revised from time to time by the Department. Failure to comply with any of the terms and conditions may render this Approval null and void, may require the proponent to cease all activities associated with this Approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, 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, delete or modify conditions in the Approval or to address significant environmental or health concerns.

TO MINISTER

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TERMS AND CONDITIONS FOR APPROVAL No. WMS17-12-001

December 20, 2017

General

- 1. This Approval is for: construction/installation of Enviro Green Septage Treatment Facility in Stephenville, NL, as per plans and specifications supplied by Enviro Green Septic Plumbing Ltd. for this Approval. Extensive future expansion or change of activities will require a separate Approval.
- 2. Any inquiries concerning this Approval shall be directed to the St. John's office of the Pollution Prevention Division (telephone: (709) 729-2556; or facsimile: (709) 729-6969).

3. In this Approval:

- accredited means the formal recognition of the competence of a laboratory to carry out specific functions;
- air contaminant means any discharge, release, or other propagation into the air and includes, but is not limited to, dust, fumes, mist, smoke, particulate matter, vapours, gases, odours, odorous substances, acids, soot, grime or any combination of them;
- BOD₅ means biochemical oxygen demand (5 day test);
- **composite sample** means a quantity of undiluted effluent collected continually at an equal rate or at a rate proportionate to flow over a designated sampling period;
- CSQG means the Canadian Soil Quality Guidelines;
- **Department** means the Department of Municipal Affairs and Environment and its successors;
- **Director** means the Director of the Pollution Prevention Division of the Department;
- **grab sample** means a quantity of undiluted sample collected at any given time. In this approval it refers to waste oil and effluent;
- hazardous waste means a product, substance or organism that is intended for disposal or recycling, including storage prior to disposal or recycling, and that:
 - (a) is listed in Schedule III of the Export and Import of Hazardous Waste Regulations under the Canadian Environmental Protection Act, 1999;
 - (b) is included in any of Classes 2 to 6, and 8 and 9 of the *Transportation of Dangerous Goods Regulations* under the *Transportation of Dangerous Goods Act*, 1992; or
 - (c) exhibits a hazard classification of a gas, a flammable liquid, an oxidizer,

- or a substance that is dangerously reactive, toxic, infectious, corrosive or environmentally hazardous;
- licensed means has a Approval issued by the Minister to conduct an activity;
- **liquid waste** is defined by the *Slump Test* (Canadian Standards Association test method A23.2-5C for determining the slump of concrete). The liquid waste slump test involves placing the waste in a 30 cm open inverted cone. The cone is removed and the immediate decrease (slump) in height of the waste material is measured. If the material slumps such that the original height is reduced by 15 cm or more, the waste is considered liquid;
- malfunction means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, wastewater treatment equipment, process equipment, or a process to operate in a normal or usual manner. Failures caused in part by poor maintenance or careless operation are not malfunctions:
- Minister means the Minister of the Department;
- PCBs means polychlorinated biphenyls;
- Plan means the specific plan as identified in the section of this Approval within which it is used. For example, in the Waste Management Plan section it refers to the Waste Management Plan;
- QA/QC means Quality Assurance/Quality Control;
- qualified professional means an individual with the appropriate education, training, and experience to perform the designated task. Depending on the task, this education, training, and experience is typically recognized through registration in a professional association by the individual or by the company to which the individual is responsible;
- register(ed), in the context of storage tanks, means that information regarding the storage tank system has been submitted to a Service NL office and a registration number has been assigned to the storage tank system. In the context of dispersion modelling, registered means submitted to and approved by the Department in accordance with departmental policy and guidelines.
- **regulated substance** means a substance subject to discharge limit(s) under the Environmental Control Water and Sewage Regulations, 2003;
- site plan means the drawings supplied in the documentation, dated November 9 2017, for this approval;
- SOP means Standard Operating Procedure;
- **spill or spillage** means a loss of gasoline or associated product in excess of 70 litres from a storage tank system, pipeline, tank vessel or vehicle, or an

uncontrolled release of any volume of a regulated substance onto or into soil or a body of water;

- storage tank system means a tank and all vent, fill and withdrawal piping associated with it installed in a fixed location and includes a temporary arrangement;
- TDS means total dissolved solids;
- TOHs (as chlorine) means total organic halogens (as chlorine);
- TPM means total particulate matter with diameters less than 100μm;
- TSS means total suspended solids;
- 4. All necessary measures shall be taken to ensure compliance with all applicable acts, regulations, policies and guidelines, including the following, or their successors:
 - Environmental Protection Act;
 - Water Resources Act:
 - Air Pollution Control Regulations, 2004;
 - Environmental Control Water and Sewage Regulations, 2003;
 - Accredited Laboratory Policy (PD:PP2001-01.2);

This Approval provides terms and conditions to satisfy various requirements of the above listed acts, regulations, Departmental policies and guidelines. If it appears that any of the pertinent requirements of these acts, regulations, policies and guidelines are not being met, then a further review of the works shall be conducted, and suitable pollution control measures may be required by the Minister.

- 5. All reasonable efforts shall be taken to minimize the impact of the operation on the environment. Such efforts include minimizing the area disturbed by the operation, minimizing air or water pollution, finding alternative uses, acceptable to the Director, for waste or rejected materials, removing equipment or structures when they no longer have further use, and considering the requirement for the eventual rehabilitation of disturbed areas when planning the development of any area on the facility property.
- 6. Enviro Green Septic Plumbing Ltd. shall provide to the Department, within a reasonable time, any information, records, reports or access to data requested or specified by the Department.
- 7. Enviro Green Septic Plumbing Ltd shall keep all records or other documents required by this Approval at the Stephenville septage treatment facility for a period of not less than three (3) years, beginning the day they were made. These records shall be made available for review by officials of the Department or Service NL when requested.
- 8. Should Enviro Green Septic Plumbing Ltd wish to deviate in any way from the terms and conditions of this Approval, a written request detailing the proposed deviation shall be made to the Minister. Enviro Green Septic Plumbing Ltd shall comply with

the most current terms and conditions until the Minister has authorized otherwise. In the case of meeting a deadline requirement, the request shall be made at least 60 days ahead of the applicable date as specified in this Approval or elsewhere by the Department

Construction

- 9. Any work that must be performed in a body of water below the high water mark shall be carried out during a period of low water levels, unless otherwise permitted in writing by the Department.
- 10. All construction operations shall be carried out in a manner that minimizes damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water in excess of applicable regulatory limits.
- 11. The use of heavy equipment shall be confined to dry stable areas and shall not be carried out in streams or bodies of water, unless otherwise permitted in writing by the Department.
- 12. All vehicles and equipment shall be in good repair, and shall be free of leaks of oil or other harmful substances that could impair water quality.
- During the construction of concrete components, formwork shall be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.
- 14. Waste hardened concrete shall not be disposed as unsuitable material at the project site. Waste hardened concrete shall be put to beneficial use on site as fill material, or it shall be sent to an approved waste disposal site.
- 15. All areas affected by this project shall be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if necessary in the opinion of this Department.
- Prior written permission is required from the Department for all work that takes place in a body of water, including but not limited to bridges, culverts, fording, stream modifications, infilling and dredging.

Waste Management

- 17. All waste generated at the facility is subject to compliance with the *Environmental Protection Act*. All non-industrial waste shall be placed in closed containers and, on at least a weekly basis, removed from the site. If required, industrial waste shall be disposed of by a licensed operator. These wastes shall be disposed of at an authorized waste disposal site with the permission of the owner/operator of the site.
- 18. Enviro Green Septic Plumbing Ltd shall ensure that all volatile chemical and solvent wastes, if they cannot be reused, are placed in suitable covered containers for

disposal in a manner acceptable to the Department. Disposal of liquid wastes at waste disposal sites in the province is not permitted.

19. Disposal of hazardous waste in a municipal or regional waste disposal site in this Province is prohibited. Transporters of hazardous waste shall have an approval issued by the Minister. Those generating hazardous waste shall have a waste generators number issued by the Director and shall also complete the required information outlined in the Waste Manifest Form.

Waste Management Plan

20. Enviro Green Septic Plumbing Ltd shall submit a Waste Management Plan for their Steptage Treatment Facility. With the goal of minimizing adverse effects on the environment, the Plan shall: be comprehensive, including all operations within the Enviro Green Septic Plumbing Ltd septage treatment facility; identify the types of waste materials (i.e. boiler ash, sewage, empty chemical packaging, etc.); provide general direction in dealing with the handling, storage, transport, treatment and disposal of waste materials; and, incorporate the basic waste management principles of reduce, reuse, recycle, recover and residual disposal. An outline of the Plan shall be submitted to the Director for review by March 31, 2018. The outline shall include a schedule of dates for preparation and implementation for each section of the Plan. The completed Plan shall then be submitted to the Director for review by August 31. 2018. Every year the Plan shall be reviewed and revised as necessary, accounting for expanding or alteration of activities. All proposed revisions shall be submitted to the Director for review. The Department will acknowledge receipt of the Plan and/or revisions, and shall provide any review comments within a reasonable time frame.

Noise

21. Efforts shall be made to minimize and control noise resulting from the Enviro Green Septic Plumbing Ltd operations and maintenance activities. All vehicles hauling materials within the facility shall have exhaust and muffling devices in good working order.

Dust Suppression

22. Enviro Green Septic Plumbing Ltd shall control dusting resulting from construction and operational activities at the site. Use of dust suppressants other than water or calcium chloride shall require approval of the Director. Enviro Green Septic Plumbing Ltd are encouraged to use best management practices when applying calcium chloride or any other approved dust suppressant.

Spill Prevention and Containment

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% of 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, by a means other than visual inspection, for their liquid containing integrity, and repairs shall be made when required.

- 24. All on site storage of petroleum shall comply with the Storage and Handling of Gasoline and Associated Products Regulations, 2003, or its successor. Storage tank systems shall be registered with Service NL. All aboveground storage tanks shall be clearly and visibly labelled with their Gasoline Associated Products (GAP) registration numbers.
- 25. Where applicable, all tanks and fuel delivery systems shall be inspected to appropriate American Petroleum Institute or Underwriters' Laboratories of Canada standards, or any other standards acceptable to this Department. The required frequency of inspections may be changed at the discretion of the Director.
- An inventory of all petroleum and chemical storage tanks shall be submitted to the Director for review by *June 1, 2018*. This inventory shall include a plan showing location, registration number (where applicable), identification number, material stored, capacity, annual throughput, tank material, tank type, tank diameter, tank height, tank colour, roof type, year of manufacture, date of installation, date of last inspection, failure history, maintenance history, dyke capacity and date of next planned inspection. Every two (2) years, an update of any significant changes to the inventory shall be submitted to the Director.

Contingency Plan

27. A Contingency Plan for the operation of Enviro Green Septic Plumbing Ltd septage treatment facility shall be submitted to the Director for review by June 1, 2018. The Plan shall clearly describe the actions to be taken in the event of a spill of a toxic or hazardous material. It shall include, as a minimum: notification and alerting procedures; duties and responsibilities of the "on-scene commander" and other involved staff; spill control and clean-up procedures; restoration of the spill site; information on disposal of contaminants; and resource inventory. Copies of the Plan shall be placed in convenient areas throughout the facility so that employees can easily refer to it when needed. Enviro Green shall ensure that all employees are aware of the Plan and understand the procedures and the reporting protocol to be followed in the event of an emergency. An annual response exercise is recommended for response personnel. Every year, as a minimum, the Plan shall be reviewed and revised as necessary. Any proposed significant revisions shall be submitted to the Director for review. Changes which are not considered significant include minor variations in equipment or personnel characteristics which do not effect implementation of the Plan.

28. Every time Enviro Green Septic Plumbing Ltd mplements the Contingency Plan, information shall be recorded for future reference. This will assist in reviewing and updating the Plan. The record is to consist of all incidents with environmental implications, and include such details as: date; time of day; type of incident (i.e. liquid spill, gas leak, granular chemical spill, equipment malfunction, etc.); actions taken; problems encountered; and, other relevant information that would aid in later review of the Plan performance. Each incident report shall be submitted to the Director as per the *Reporting* section.

Site Decommissioning and Restoration Plan

29. A Plan to restore areas disturbed by the operation shall be submitted to the Director for review by *June 1, 2018*. Wherever possible, the Plan shall promote progressive reclamation of disturbed areas. Enviro Green Septic Plumbing Ltd. shall proceed through a phased environmental site assessment process to closure.

Rehabilitation and Closure Plan

30. A Rehabilitation and Closure Plan detailing the actions to be taken to restore areas disturbed by the operation shall be submitted to the Director for review. The Plan shall be implemented progressively as required and completed upon site closure. Enviro Green Septic Plumbing Ltd. shall perform an annual review of the Plan, accounting for an expansion or alteration of activities, and revise the Plan as necessary. All proposed revisions shall be submitted to the Director for review.

Analysis and QA/QC

- 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 inhouse 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 Enviro Green shall be billed for each laboratory inspection in accordance with Schedule 1 of the Accredited Laboratory Policy (PD:PP2001-01.02). 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.
- 32. If Enviro Green Septic Plumbing Ltd wish 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. If using a commercial laboratory, Enviro Green Septic Plumbing Ltd shall contact that commercial laboratory to determine and to implement the sampling and transportation QA/QC requirements for those activities.
- 33. 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 *June 1, 2018* to the Director.

34. Enviro Green shall bear all expenses incurred in carrying out the environmental monitoring and analysis required under conditions of this Approval.

Monitoring Alteration

- Although a monitoring program is not part of this Approval, the Department may require a monitoring program when it is the judgement of the Director that:
 - pollutants might be released to the surrounding environment without being detected; or
 - an adverse environmental effect may occur.

Reporting

- 36. All incidents of:
 - Contingency Plan implementation; or
 - non-conformance of any condition within this approval; or
 - spillage or leakage of a regulated substance; or
 - whenever discharge criteria is, or is suspected to be, exceeded; or
 - verbal/written complaints of an environmental nature from the public received by Enviro Green Septic Plumbing Ltd related to the septage treatment facility in Stephenville, whether or not they are received anonymously;

shall be immediately reported, within one working day, to this Department by phoning (709) 729-2556.

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 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. The address for written report submission is:

Director, Pollution Prevention Division Department of Municipal Affairs and Environment P.O. Box 8700 St, John's, NL A1B 4J6 37. Any spillage or leakage of gasoline or associated product shall be reported immediately through the Canadian Coast Guard at 1-(709)-772-2083.

Expiration

- 38. This Approval expires December 20, 2019.
- 39. Should the proponent wish to continue to construct Enviro Green Septage Treatment Facility beyond this expiry date, a written request shall be submitted to the Director for the renewal of this approval. Such request shall be made prior to *June 1, 2019*

cc:

Mr. Robert Locke Manager of Operations and Environmental Protection Service NL 5 Mews Place P.O. Box 8700 St. John's, NL A1B 4J6