

Government of Newfoundland and Labrador Department of Environment and Climate Change Water Resources Management Division

PERMIT TO CONSTRUCT

Pursuant to the Water Resources Act, SNL 2002 cW-4.01, specifically Section(s) 37

Date: MAY 06, 2024 File No: <u>844.151.001</u> Permit No: <u>WS13622-2024</u>

Permit Holder: Town of Lamaline

PO Box 40

Lamaline NL A0E 2C0

lamalinecouncil1@outlook.com

Attention: Theresa Hillier

Re: Lamaline - Water System Upgrades

Permission is hereby given for: the installation of a new sodium hypochlorite system, new piping and all related appurtenances as described in the drawings titled, Town of Lamaline Water System Upgrades" as received from Meridian Engineering Inc. on March 21, 2024; 17-GI-24-00078.

- This Permit does not release the Permit Holder from the obligation to obtain appropriate approvals from other concerned municipal, provincial and federal agencies.
- The Permit Holder must obtain the approval of the Crown Lands Administration Division if the project is being carried out on Crown Land.
- This Permit is subject to the terms and conditions indicated in Appendices A and B (attached).
- It should be noted that prior to any significant changes in the design or installation of the proposed works, or in event of changes in ownership or management of the project, an amendment to this Permit must be obtained from the Department of Environment and Climate Change under Section 49 of the *Water Resources Act*.

(for) MINISTER

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

Department of Environment and Climate Change

File No: **844.151.001** Permit No: **WS13622-2024**

APPENDIX A

Terms and Conditions for Permit

Water & Sewer General

- 1. Water pumped from excavations or work areas, or any runoff or effluent directed out of work sites, must have silt and turbidity removed by settling ponds, filtration, or other suitable treatment before discharging to a body of water. Effluent discharged into receiving waters must comply with the *Environmental Control Water and Sewage Regulations*, 2003.
- 2. All operations must be carried out in a manner that prevents damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.
- 3. Any areas adversely affected by this project must 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 considered necessary in the opinion of this Department.
- 4. All waste materials resulting from this project must be disposed of at a site approved by the Department of Digital Government and Service NL.
- 5. The works proposed must satisfy the requirements of the latest applicable codes and standards, and be consistent with or otherwise address the design criteria set out in this Department's publication *Guidelines for the Design*, *Construction, and Operation of Water and Sewerage Systems*, 2005, and as amended from time to time.
- 6. The work must be undertaken in strict compliance with the submitted documents and the latest version of the *Municipal Water, Sewer and Roads Master Construction Specifications*. A copy of all documents, including the *Municipal Water, Sewer and Roads Master Construction Specifications* must be available for viewing at the construction site office at all times.
- 7. Liaison is to be maintained with the Environmental Scientist representing the Drinking Water and Wastewater Section of this Department, during the construction and operation of the project. They shall be notified of the preconstruction and post-construction meetings so that they may attend, if deemed necessary. They can be reached at telephone (709)729-2558.
- 8. Officials of this Department may visit the project from time to time to ensure that work is carried out within the provisions of this Permit, and is not creating any environmental hazard.
- 9. Any changes in the approved works, or works other than those specified in the application, must be submitted, in writing, to this Department, and approved, in the form of an Amendment to this Permit, prior to any work.
- 10. Copies of this Permit, as well as any subsequent Amendments, must be provided to the contractor(s) who will be carrying out these works, and to the engineer's site representative.
- 11. The attached Completion Report (Appendix C) for Permit No. 13622 must be completed and returned to this Department upon completion of the approved works. Pictures must be submitted along with the completion report, showing the project site prior to and after development.
- 12. This Permit is valid for two years from the date of issue. Work must be completed by that date or the application and approval procedure must be repeated.

- 13. The drinking water and wastewater system shall be operated and maintained in accordance with the Permit to Operate issued by this Department.
- 14. Management of stormwater is the responsibility of the municipality or LSD. Stormwater management should focus on ensuring that the post-development stormwater runoff rate will be equal to or less than the pre-development runoff rate. Any stormwater runoff has the potential to contribute to flooding downstream which may have liability issues for the municipality or LSD if not managed properly.
- 15. The Owner must update any drawings maintained of the drinking water or wastewater system to reflect the modification or replacement of the works, where applicable.

Water Systems

- 16. All components, lubricants and chemicals provided shall be compatible for use with drinking water and shall meet the requirements of ANSI/NSF 60 Drinking Water Treatment Chemical Standard and ANSI/NSF 61 Drinking Water and System Component Standard and any other standard applicable to potable water.
- 17. Backflow prevention devices should/must be installed on service connections where there is a high risk of contamination of the potable water supply.
- 18. All new lines and appurtenances must be disinfected by an approved method described in the latest edition of the AWWA C651 Standard for Disinfecting Watermains and using only chlorine products that meet the NSF 60 standard.

Chlorination

- 19. A backflow prevention device, in this case a hose connection vacuum breaker, non removable, meeting or exceeding CSA 64.2, shall be attached to any hose bibb connection, to prevent the possibility of contaminants entering the potable water distribution system due to back-siphonage.
- 20. The upgrading of the existing chlorination facility must be carried out in such a way as there will be minimal interruption of the water supply and chlorination system. In this regard, water consumers and the Regional Office of the Department of Digital Government and Service NL shall be kept informed and appropriate action taken to address any potential or encountered problems.
- 21. The injector for the chlorination system shall be located as close as possible to the diffuser (preferably attached) in order to minimize the pressurized chlorine solution line. The chlorine injection lance shall be installed in the pipe so that the chlorine solution is being injected within the flow of water to ensure appropriate mixing.
- 22. The hypochlorination system shall be set-up such that chlorine is injected in the line from the source prior to any other connection to that line with the exception of the raw water sampling tap. Also, in this regard the chlorinated water shall enter one end of the chlorine contact tank and exit out of the opposite end to allow for maximum contact time and mixing and to avoid potential short circuiting.
- 23. A sample tap shall be provided so that water samples can be obtained from the raw water source and from an appropriate location after chlorination. Taps used shall be of the smooth-nosed type without interior or exterior threads and shall not have a screen, aerator or other such appurtenance.
- 24. An emergency shower and eye wash station that is in compliance with ANSI Z358.1-2014 and meets the requirements of the appropriate Safety Data Sheet (SDS) shall be installed in a convenient location(s) within each facility.
- 25. The sodium hypochlorite shall be stored in a dark cool area to minimize loss of strength of the solution. In this regard a storage cabinet should be provided and shall be located away from any direct heat and light sources.
- 26. Personal protective equipment such as goggles and rubber gloves suitable for handling sodium hypochlorite must be provided.

27. Portable equipment must be provided for measuring chlorine residuals. The equipment shall have digital display readout, enable measurement of chlorine residuals to the nearest 0.02 mg/L, and shall be of a type approved by this Department.

Miscellaneous

- 28. The Permit Holder must prevent erosion of drainage ditches, streams or other natural bodies of water by installing rip-rap and/or sodding.
- 29. All drains and vents shall be equipped with screens to prevent the entry of insects, birds and rodents.

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

Department of Environment and Climate Change

File No: **844.151.001**Permit No: **WS13622-2024**

APPENDIX B

Special Terms and Conditions for Permit

- 1. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall keep all systems and works in good condition and repair and in accordance with all laws, by-laws, directions, rules and regulations of any governmental authority. The Permit Holder or its agent(s), subcontractor(s), or consultant(s) shall immediately notify the Minister if any problem arises which may threaten the structural stability of the systems and works, endanger public safety and/or the environment or adversely affect others and/or any body of water either in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for all damages suffered by the Minister and Government resulting from any defect in the systems and works, operational deficiencies/inadequacies, or structural failure.
- 2. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall operate the said Project and its systems and works in a manner which does not cause any water related and/or environmental problems, including but not limited to problems of erosion, deposition, flooding, and deterioration of water quality and groundwater depletion, in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for any and all damages associated with these problems caused as a result of changes, deficiencies, and inadequacies in the operational procedures by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).
- 3. If the Permit Holder or its agent(s), subcontractor(s), or consultant(s) fails to perform, fulfil, or observe any of the terms and conditions, or provisions of this Permit, as determined by this Department, the Minister may, without notice, amend, modify, suspend or cancel this Permit in accordance with the *Water Resources Act*.
- 4. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) indemnify and hold the Minister and Government harmless against any and all liabilities, losses, claims, demands, damages or expenses including legal expenses of any nature whatsoever whether arising in tort, contract, statute, trust or otherwise resulting directly or indirectly from granting this Permit, systems and works in or outside the said Project areas, or any act or omission of the Permit Holder or its agent(s), subcontractor(s), or consultant(s) in or outside the said Project areas, or arising out of a breach or non-performance of any of the terms and conditions, or provisions of this Permit by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).
- 5. This Permit is subject to all provisions of the *Water Resources Act* and any regulations in effect either at the date of this Permit or hereafter made pursuant thereto or any other relevant legislation enacted by the Province of Newfoundland and Labrador in the future.
- 6. This Permit shall be construed and interpreted in accordance with the laws of the Province of Newfoundland and Labrador.

File No: **844.151.001**Permit No: **WS13622-2024**

cc: Mr. Kallan Fitzgerald
Meridian Engineering Inc.
10 Thompson Street
Clarenville, NL A5A 1Y9
kfitzgerald@meridianengineering.ca

cc: Mr. Inayat Rehman, P.Eng.
Regional Engineer
Department of Transportation and Infrastructure
P.O. Box 8700
St. John's, NL A1B 4J6
inayatrehman@gov.nl.ca

cc: Mr. Michael Duke (Clarenville - Eastern)
Manager
Digital Government and Service NL
8 Myers Ave
Clarenville, NL A5A 1T5
michaelduke@gov.nl.ca

cc: Ms. Deneen Spracklin, P.Eng.
Manager, Drinking Water and Wastewater Section
Water Resources Management Division
Department of Environment and Climate Change
P.O. Box 8700
4th Floor, West Block, Confederation Building
St. John's, NL A1B 4J6
dspracklin@gov.nl.ca



Government of Newfoundland and Labrador Department of Environment and Climate Change Water Resources Management Division

Appendix C - Completion Report

suant to the N	Vater Resources Act, SNL 2002 cW-4.01	1, specifically Section(s) 37
te:	MAY 06, 2024	File No: <u>844.151.001</u> Permit No: <u>WS13622-2024</u>
mit Holder:	Town of Lamaline PO Box 40 Lamaline NL A0E 2C0	
	lamalinecouncil1@outlook.com	
ention:	Theresa Hillier	
:	Lamalina Water System Unguades	
nission was g		lium hypochlorite system, new piping and all related appurten
nission was g	given for : the installation of a new soc	lium hypochlorite system, new piping and all related appurten
mission was glescribed in to on March 2 I (the Perthe projet Department)	given for: the installation of a new socioned the drawings titled, Town of Lamaline 1, 2024; 17-GI-24-00078. Trait Holder named above or agent autoct described above was completed in accomplessed.	dium hypochlorite system, new piping and all related appurten e Water System Upgrades" as received from Meridian Enginee thorized to represent the Permit Holder) do hereby certify that accordance with the plans and specifications submitted to the age and that the work was carried out in strict compliance with

This completion report must be completed and forwarded to the following address upon completion of the approved work.

Department of Environment and Climate Change Water Resources Management Division PO Box 8700 St. John's NL A1B 4J6