

Government of Newfoundland and Labrador Department of Municipal Affairs and Environment Water Resources Management Division

PERMIT TO CONSTRUCT

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

Date: SEPTEMBER 11, 2020 File No: 842.062.1

Permit No: WS11287-2020

Permit Holder: **Town of St. George's**

PO Box 250

St. George's NL A0N 1Z0

townmanager@townofstgeorges.com

Attention: Ms. Jocelyn Butt, Town Manager

Re: St. George's - Water Storage Tank

Permission is hereby given for: the replacement of the existing water storage tank with a new 829 cubic meter glass fused to steel bolted water storage tank with active mixing system, and related works and appurtenances as shown on a set of drawings as received from Greatario Industrial Storage Systems on August 25, 2020 and additional information submitted on September 3, 2020.

- 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 Municipal Affairs and Environment under Section 49 of the *Water Resources Act*.

(for) MINISTER

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

Department of Municipal Affairs and Environment

File No: <u>842.062.1</u> Permit No: <u>WS11287-2020</u>

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 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 the Department of Municipal Affairs and Environment 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 pre-construction and post-construction meetings so that they may attend, if deemed necessary. They can be reached at telephone (709) 637-2034.
- 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. 11287 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 system shall be operated and maintained in accordance with the Permit to Operate issued by this Department.
- 14. The Owner must update any drawings maintained of the drinking water system to reflect the modification or replacement of the works, where applicable.

Water Systems

- 15. All new waterlines and appurtenances shall be hydrostatically tested in accordance with the *Municipal Water*, *Sewer and Roads Specifications*.
- 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. 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.

Water Storage Tanks

- 18. The water storage tank must be disinfected by an approved method as described in the latest edition of the **AWWA C652 Standard For Disinfection of Water Storage Facilities Standard.** The solution used for disinfecting the water storage reservoir may not be discharged to a water course. After final flushing, samples shall be collected and tested for bacteriological quality. A copy of the test results shall be submitted to this Department (Water Resources Management Division) before the storage reservoir is **placed in service.**
- 19. The water storage tank, all appurtenances and coatings must meet the latest ANSI/NSF 61 Drinking Water and System Component Standard, the latest AWWA Standards, and any other standards and codes that may be applicable.
- 20. Water storage tank capacity shall meet the requirements of Peak Balance Storage, Fire Storage and Emergency Storage as set out in the *Guidelines for The Design*, *Construction*, and *Operation of Water and Sewerage Systems*, 2005.
- 21. The water storage tank must be equipped with a mixing system.
- 22. The water storage tank must be integrated into the SCADA system, including instrumentation to control and monitor the water level in the tank.

Miscellaneous

- 23. The Permit Holder must prevent erosion of drainage ditches, streams or other natural bodies of water by installing rip-rap and/or sodding.
- 24. All drains and vents shall be equipped with screens to prevent the entry of insects, birds and rodents.
- 25. The ends of drains and overflows shall be located so as to prevent erosion. Where necessary, concrete or similar splash plates shall be located below the end of the overflow, and the immediate surrounding area shall be filled to a depth of 10 cm with 19 mm minus stone to prevent ponding.

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

Department of Municipal Affairs and Environment

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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: <u>842.062.1</u> Permit No: <u>WS11287-2020</u>

cc: Mr. Don Dicesare, P. Eng.
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34 Main Street
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don.dicesare@dmg.nf.ca

cc: Ms. Deneen Spracklin, P.Eng.

Environmental Engineer, Drinking Water and Wastewater Section Water Resources Management Division
Department of Municipal Affairs and Environment
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cc: Mr. Chris Power, P. Eng.

Regional Engineer, Western Regional Office Department of Municipal Affairs and Environment 6th Floor, Sir Richard Squires Building P.O. Box 2006 Corner Brook, NL A2H 6J8 ChrisPower@gov.nl.ca

cc: Ms. Susan Hoddinott (Western/Labrador) Regional Director Service NL PO Box 2006 Corner Brook NL A2H 6J8

SusanHoddinott@gov.nl.ca

cc: Mr. Casey Conrad, P. Eng., PMP Greatario Engineered Storage Systems 2353 Hunter Street Halifax NS B3K 4V7 CConrad@Greatario.com

cc: Mr. Chris Blanchard, B.Tech.(Env), AScT Environmental Scientist Water Resources Management Division Department of Municipal Affairs and Environment P.O. Box 2006 Corner Brook, NL A2H 6J8 cblancha@gov.nl.ca



Government of Newfoundland and Labrador Department of Municipal Affairs and Environment Water Resources Management Division

Appendix C - Completion Report

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

		Permit No: WS11287-2020
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	St. George's NL A0N 1Z0 townmanager@townofstgeorges.com	
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	St. George's - Water Storage Tank	
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el bolted values as a street on So a	vater storage tank with active mixing system, and received from Greatario Industrial Storage System	related works and appurtenances as shown on a sans on August 25, 2020 and additional information or server the Permit Holder) do hereby certify we with the plans and specifications submitted and that the work was carried out in strict

St. John's NL A1B 4J6