

## PERMIT TO CONSTRUCT

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 36, 48

Date: **JULY 20, 2017**

File No: 842.109.1  
Permit No: WS9020-2017


Permit Holder: **Town of McIvers  
PO Box 4375 RR# 2  
Corner Brook NL A2H 6B9**

Attention: **Mr. Warren Blanchard, Mayor**

Re: **McIvers - Sanitary Sewer System & Wastewater Treatment System - Phase 5**

Permission is hereby given for : the installation of 455 m of 200 mm diameter PVC sewermain, a BLIVET BMS1000 wastewater treatment system and related works and appurtenances as described in a specification entitled "Town of McIvers, Sanitary Sewer System, Phase 5" as well as a set of revised drawings numbered 3086, sheets SP1 to SP2 as received from Atlantic Engineering Consultants Ltd. on May 1, 2017 and additional information provided on May 3, 2017 and July 7, 2017.

- 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*.
- Failure to comply with the terms and conditions will render this Permit null and void, place the Permit Holder and their agent(s) in violation of the *Water Resources Act* and make the Permit Holder responsible for taking any remedial measures as may be prescribed by this Department.



MINISTER

**APPENDIX A**  
**Terms and Conditions for Permit**

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**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 Environment and Climate Change 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 Design Approval Specialist representing the Drinking Water and Wastewater Section of this Department, during the construction and operation of the project. The Specialist shall be notified of the pre-construction and post-construction meetings so that he may attend, if deemed necessary. He 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. 9020 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 wastewater 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 wastewater system to reflect the modification or replacement of the works, where applicable.

**Sewer Systems**

15. Safety landings to be installed in all manholes over 5m in depth and in accordance with the Municipal Master Specification.
16. Storm water drainage, including roof drains, weeping tile drains, and street drainage, shall not be connected to the sanitary sewer system.
17. In the event that private or existing sewer lines are disturbed during construction, the lines are to be restored to their original *working*

condition. Care shall be taken to ensure that soil or other material does not enter the lines to cause blockage.

18. Drop manholes must be provided for lateral sanitary sewers entering a manhole at an elevation of 600 mm or more above the manhole invert. Where the difference between the incoming sanitary sewer and the manhole invert is less than 600 mm, the invert should be filleted to prevent deposition of solids.
19. The flow channel through manholes should be made to conform in shape and slope to that of the sanitary sewer.
20. The direct connection of sanitary sewer service lines to manholes is prohibited unless the service enters at the flow line of the manhole. In this instance, filleting must be provided to prevent solids deposition.
21. All sanitary sewers shall be laid or covered with sufficient depth of suitable material to prevent frost penetration and damage from traffic loading.

#### **Wastewater Treatment**

22. Effluent from the wastewater treatment facility must meet the *Environmental Control Water and Sewage Regulations*.
  23. Standby or backup power shall be provided where discharges may endanger public health or the environment, for aeration systems, activated sludge systems, and disinfection systems.
  24. Flow measurement facilities shall be provided on all wastewater treatment plants for monitoring of the final discharged effluent.
  25. The wastewater treatment plant shall be enclosed by a fence.
  26. The wastewater treatment plant shall be equipped with adequate gas detectors.
  27. Provision should be made for sampling at each supernatant draw-off level. An alternate disposal method for the supernatant liquor or hauling from the plant shall be provided in the case the supernatant is not suitable or other conditions make it advisable not to return it to the plant.
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28. Emergency generators and fuel storage tanks must be approved by Service NL.
  29. The package wastewater treatment facility must be installed and commissioned in accordance with the manufacturer's instructions. This Department must be notified of commissioning training and start-up of the treatment facility.

#### **General Alterations**

30. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
31. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.
32. The use of heavy equipment in streams or bodies of water is not permitted. The operation of heavy equipment must be confined to dry stable areas.
33. All vehicles and equipment must be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.
34. During the construction of concrete components, formwork must 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.
35. Wood preservatives such as penta, CCA or other such chemicals must not be applied to timber near a body of water. All treated wood or timber must be thoroughly dry before being brought to any work site and installed.
36. The bed, banks and floodplains of watercourses, or other vulnerable areas affected by this project, must be adequately protected from erosion by seeding, sodding or placing of rip-rap.
37. Periodic maintenance such as painting, resurfacing, clearing of debris, or minor repairs, must be carried out without causing any physical disruption of any watercourse. Care must be taken to prevent spillage of pollutants into the water.
38. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.

39. Sediment and erosion control measures must be installed before starting work. All control measures must be inspected regularly and any necessary repairs made if damage is discovered.
40. Fill material must be of good quality, free of fines or other substances including metals, organics, or chemicals that may be harmful to the receiving waters.
41. All work must be carried out within the Permit Holder's legal property boundaries.

**Special Conditions**

42. Wastewater quality sampling and flow monitoring of the wastewater treatment system shall be conducted to confirm the system is functioning as intended. The wastewater quality monitoring program shall consist of quarterly tests on the influent and effluent wastewater. Testing shall be done for CBOD5, total suspended solids, un-ionized ammonia, total phosphorous, total coliform and *E. Coli* counts (diluted if necessary), pH, and temperature. Also, quarterly flow monitoring reports shall be submitted to the Department.

**Outfalls and Overflows**

43. A manhole or other sampling location shall be provided so that an effluent sample can be obtained at a point after the final treatment process and prior to discharge to the receiving water.

**Alternative Disinfection**

44. UV systems used to disinfect wastewater must be equipped with a meter to monitor transmittance. Flow gates and weirs shall be used to control the water level over the top of the UV lamps.

**APPENDIX B**  
**Special Terms and Conditions for Permit**

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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 and/or Ministerial orders and guidelines, as determined by this Department, the Minister may, after providing ten (10) day notice to the Permit Holder, 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.

- cc: Amir Ali Khan, Ph.D., P.Eng.  
Manager, Water Rights, Investigations and Modelling Section  
Water Resources Management Division  
Department of Municipal Affairs and Environment  
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4th Floor, West Block, Confederation Building  
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- cc: Mr. Chris Blanchard, B.Tech.(Env), AScT  
Environmental Scientist  
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Department of Municipal Affairs and Environment  
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Corner Brook, NL A2H 6J8  
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- 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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dspracklin@gov.nl.ca
- cc: Mr. Chris Power, P. Eng.  
Regional Engineer, Western Regional Office  
Department of Municipal Affairs and Environment  
6th Floor, Sir Richard Squires Building  
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Corner Brook, NL A2H 6J8  
ChrisPower@gov.nl.ca
- cc: Ms. Susan Hoddinott  
Regional Director  
Service NL  
PO Box 2006  
Corner Brook NL A2H 6J8  
SusanHoddinott@gov.nl.ca
- cc: Fisheries Protection Division  
Ecosystem Management Branch  
Fisheries and Oceans Canada  
P.O. Box 5667  
St. John's, NL A1C 5X1  
FPP-NL@dfo-mpo.gc.ca
- cc: Mr. D. Dicesare, P. Eng.  
Atlantic Engineering Consultants  
34 Main Street  
Corner Brook, NL A2H 1C3  
djdicesare@aecl.nfld.net

### Appendix C - Completion Report

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 36, 48

Date: **JULY 20, 2017**

File No: 842.109.1  
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Permit Holder: **Town of McIvers  
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Corner Brook NL A2H 6B9**

Attention: **Mr. Warren Blanchard, Mayor**

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*I (the Permit Holder named above or agent authorized to represent the Permit Holder) do hereby certify that the project described above was completed in accordance with the plans and specifications submitted to the Department of Municipal Affairs and Environment and that the work was carried out in strict compliance with the terms and conditions of the Permit issued for this project.*

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

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

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