

## PERMIT TO CONSTRUCT

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 37, 39, 48

Date: **AUGUST 03, 2018**

File No: **842.057.1**  
Permit No: **WS9781-2018**

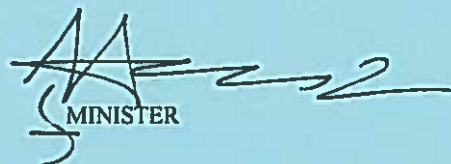
Permit Holder: **Town of Rose Blanche - Harbour Le Cou**  
**PO Box 159**  
**Rose Blanche-Harbour le Cou NL**  
**A0M 1P0**

Attention: **Ms. Tammy Farrell**

Re: **Rose Blanche - Harbour Le Cou - Water System Upgrades**

Permission is hereby given for : **the installation of a new water intake complete with air backwash lines and hydroburst system, two new submersible pumps, new circulating pumps, new hypochlorination system and related works and appurtenances as described in a specification entitled "Town of Rose Blanche - Harbour Le Cou, Water System Upgrades" as well as a set of drawings numbered 161354, sheets SP-01 to SP-04 inclusive, C-01 to C-07 inclusive and E-01 as received from Anderson Engineering Consultants Limited on June 18, 2018 and additional information submitted on August 1 and 21, 2018.**

- 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**

---

**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. 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.
5. 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.
6. 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 .
7. 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.
8. 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.
9. 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.
10. The attached Completion Report (Appendix C) for Permit No. 9781 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.
11. 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.
12. The drinking water and wastewater system shall be operated and maintained in accordance with the Permit to Operate issued by this Department.
13. 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**

14. All new waterlines and appurtenances shall be hydrostatically tested in accordance with the *Municipal Water, Sewer and Roads Specifications*.
15. 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.
16. 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

17. 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.
18. 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 Service NL shall be kept informed and appropriate action taken to address any potential or encountered problems.
19. 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.
20. An emergency shower and eye wash station that is in compliance with ANSI Z358.1-2014 and meets the requirements of the appropriate Materials Safety Data Sheet (MSDS) shall be installed in a convenient location(s) within each facility.
21. 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.
22. Personal protective equipment such as goggles and rubber gloves suitable for handling sodium hypochlorite must be provided.

### Intake

23. A water supply intake may be placed in Rose Blanche Brook as part of the water supply system for the Town of Rose Blanche-Harbour le Cou .
24. The intake shall consist of a stainless steel drum screen including an air backwash system.
25. Pipe zone cutoff walls or other means must be installed to prevent lowering of the water table due to groundwater flow through the porous pipe zone material.
26. Where pumping is used to bypass flow, cofferdams must be installed both above and below areas of construction. The Permit Holder must provide pumps with sufficient capacity to prevent washout of cofferdams.
27. Cofferdams must be properly designed and constructed of suitable materials to prevent leakage and to resist loss of any material as a result of erosion. Cofferdams must be removed upon completion of their intended function. All material must be removed carefully to prevent disturbance of the water body and to prevent water quality degradation.
28. Close cut clearing and disposal must be undertaken around the perimeter of the water supply reservoir to an elevation not less than 200 mm above the proposed high water mark. Special care should be exercised to minimize siltation and erosion problems at the new shore wash area.
29. The intake must be fitted with a removable mesh screen or a trash rack.
30. Intake ports must be located above the bottom of the stream, lake or impoundment, but at sufficient depth to be kept submerged at low water levels and below ice level. The intake structure must not draw air.
31. Adequate protection must be provided against clogging by sediment, debris, ice, frazil ice, wind, floatation and wave pressure.

### PPWSA General

32. All persons working on this project must be informed that they are within a Protected Public Water Supply Area, and must be made aware of all conditions of this Permit. A copy of this Permit must be on site during operations.
33. An undisturbed (no cutting or ground disturbance) buffer zone of at least **150 metres** shall be maintained around Rose Blanche Brook, at least **50 metres** along both sides of all streams and main tributaries running into Rose Blanche Brook, and at least **30 metres** around all ponds and along both sides of all other water bodies. Activity or development within these buffer zones is prohibited. All buffer zones must be marked with signs or flagging tape to avoid encroachment into the buffer zones.
34. Equipment storage, maintenance facilities associated with this project, and all maintenance other than emergency repairs must not be located/carried out within the Protected Public Water Supply Area.
35. All waste material is to be collected in refuse containers, and disposed of at an approved waste disposal site outside the Protected Public Water Supply Area in accordance with the *Environmental Protection Act, SNL 2002 cE-14.2.*
36. The Department reserves the right to require that the Permit Holder follow, and cover all costs incurred by the Permit Holder or this

department, associated with any water quality monitoring program that may be ordered by the Minister for the purpose of ensuring that the water quality is maintained within acceptable guidelines.

37. Liaison is to be maintained with the appropriate Municipal Authority and Environmental Scientist. If there are any specific problems (ie sedimentation, fuel spill, other potential water quality impairment), the appropriate Town Manager/Clerk must be notified immediately at (709) 956-2540. The Environmental Scientist must also be notified immediately at (709)637-2542.
38. The felling or disposing of trees, parts of trees, sawdust, bark, logging debris or slash into a water body or upon the frozen surface of a water body is strictly prohibited.
39. Treated wood shall not be used in a water body or within fifty (50) metres of the high water mark of any water body. The use of creosote treated wood anywhere within the Protected Public Water Supply Area is strictly prohibited.
40. Any changes in water quality resulting directly from this project, rendering the water unsuitable as a public water supply, are the responsibility of the Permit Holder. The Minister may order the Permit Holder to provide an alternate source of potable water to the affected community until water quality returns to an accepted level.
41. All fill material for the infiltration gallery will be from a stockpile that has not been in contact with any other materials that may adversely impact it or have additional materials added to it.
42. All vehicles and equipment must be in good working order with no leaking fuel, oil, or other harmful substances that could impair water quality.
43. All stationary motorized equipment and fuel tanks shall have metal trays, absorbent pads or impervious liners under them to catch any leaking fuel or oil.
44. Drainage from roads and other disturbed areas into any body of water must first be discharged into a settling pond, a vegetated area or pass through a sedimentation fence where all suspended material can settle out before draining into any body of water.
45. Any streams not visible on a 1:50,000 scale map (including field identified streams) shall require a minimum buffer of 30 m.
46. For any clearing inside buffer zones: no ground disturbance (no disturbance to the root mat, no grubbing, or removal of soil) shall take place in the buffer zones. The Permit Holder is to ensure that the appropriate best practices are employed to prevent any detrimental effects that could impact water quality. Where possible, work in buffer zones shall be completed when the ground is frozen.

#### **Fuel Storage**

47. There shall be no bulk fuel storage associated with this project within the protected water supply area. Refueling sites shall be located at least 150 metres from any water body or wetland. The Permit Holder is hereby informed that fuel storage and handling requires a separate approval under the *Storage and Handling of Gasoline and Associated Products Regulations*, CNR 775/96.
48. A complete oil spill clean-up kit must be on site at all times when gasoline or fuel powered equipment is being used or refueled. The kit must contain the following:
  - Fire pump and 100 metres of hose
  - Two hand operated fuel pumps
  - Six recovery containers such as empty 205 litre drums
  - Four shovels
  - Two pick axes
  - Ten metres of containment boom
  - Twenty-five absorbent pads
  - One hundred litres of loose absorbent material
49. Contaminated soil must be removed from the site and disposed of at an approved location outside the protected public water supply area, in accordance with the *Environmental Protection Act, SNL 2002 cE-14.2*.
50. Any spills of gasoline, fuel or oil, regardless of volume, shall be reported immediately to the Environmental Scientist and the appropriate Municipal Authority or Watershed Management Committee by calling 637-2034 and (709)956-2540 respectively. Furthermore, all spills in excess of 70 litres shall be reported immediately to the 24 hour spill report line at 1-800-563-9089.
51. Only biodegradable hydraulic fluids shall be used within fifteen (15) metres of Rose Blanche Brook.

#### **Protected Miscellaneous**

52. The Permit Holder must inspect the site daily, and any water quality impairment related problems are to be reported immediately to the Environmental Scientist at 637-2034 and the appropriate Municipal Authority or Watershed Monitoring Committee at (709)956-2540.
53. The Permit Holder is required to provide this Department with all documentation, information and data which may be requested or

required in order to carry out the inspection or investigation.

54. Sawdust, bark, and logs must not be stored within undisturbed buffer zones of any body of water, and must be removed at regular intervals to prevent excessive accumulation at the site.
55. Wood and brush removed from the work site must not be stored within undisturbed buffer zones of any water body.

#### **Special Conditions**

56. The use of heavy equipment in streams or waterbodies is prohibited. The operation of heavy equipment must be confined to dry stable areas.
57. Every effort must be made to avoid soil or sediment from eroding into the reservoir, with special care taken within a 150m buffer around the reservoir as this area may be sensitive to erosion and sedimentation issues.
58. All equipment entering Rose Blanche Brook, including but not limited to divers and tools, will be cleaned before entering the water body.

#### **Infilling**

59. The constructed works must be inspected regularly so that action can be taken to undertake repairs as required.
60. Fill material must be obtained from an approved quarry site. It must not be taken from beaches or streams, and must not be dredged from a body of water.
61. The natural course of any stream must not be altered.
62. Infilling must not cause increased water elevation upstream or increase flow velocity downstream of the site. Reduction of the natural cross sectional area of any watercourse is not permitted.
63. Infilling must not disrupt the established surface drainage pattern of the area.
64. The constructed works must comply with all other terms and conditions provided in the Crown Lands grant, lease, or license for occupancy.
65. Select heavy rocks must be placed along the toe of any infilling to provide slope stability and erosion protection.

#### **General Alterations**

66. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
67. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.
68. 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.
69. 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.
70. 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.
71. 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.
72. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.
73. 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.
74. 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.
75. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.

76. All work must be carried out within the Permit Holder's legal property boundaries.

**Special Conditions**

77. Although the chlorination facility will be upgraded, the existing transmission main will only provide marginal chlorine contact time based upon theoretical flows. To address this, the town must carry out a flow monitoring program to establish system flows in order to verify the actual chlorine contact time. In the interim, the system operator must maintain a minimum of 0.47 ppm of free chlorine at the first water user.
78. As part of future upgrading of the water supply system, consideration must be given to installing a pH adjustment system to address water corrosiveness.

**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 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  
P.O. Box 8700  
4th Floor, West Block, Confederation Building  
St. John's, NL A1B 4J6  
akhan@gov.nl.ca
- cc: File Copy for Binder
- 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
- cc: Ms. Carla Hayes, P.Tech  
Environmental Scientist , Drinking Water and Wastewater Section  
Water Resources Management Division  
Department of Municipal Affairs and Environment  
P.O. Box 2006  
Corner Brook, NL A2H 6J8  
CarlaHayes@gov.nl.ca
- cc: Ms. Deneen Spracklin, P.Eng.  
Environmental Engineer, Drinking Water and Wastewater Section  
Water Resources Management Division  
Department of Municipal Affairs and Environment  
P.O. Box 8700  
4th Floor, West Block, Confederation Building  
St. John's, NL A1B 4J6  
dspracklin@gov.nl.ca
- cc: Jeremy Keeping (Western)  
Land Management Specialist  
Crown Lands Administration  
jeremykeeping@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  
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: 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. Steve Osmond, P. Eng.  
Anderson Engineering Consultants Ltd.  
Suite 103, 3 Union Street  
Corner Brook, NL A2H 5M7  
andersoneng.sosmond@nfld.net

### Appendix C - Completion Report

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 37, 39, 48

Date: **AUGUST 03, 2018**

Permit Holder: **Town of Rose Blanche - Harbour Le Cou  
PO Box 159  
Rose Blanche-Harbour le Cou NL  
A0M 1P0**

Attention: **Ms. Tammy Farrell**

Re: **Rose Blanche - Harbour Le Cou - Water System Upgrades**

File No: **842.057.1**  
Permit No: **WS9781-2018**

Permission was given for : the installation of a new water intake complete with air backwash lines and hydroburst system, two new submersible pumps, new circulating pumps, new hypochlorination system and related works and appurtenances as described in a specification entitled "Town of Rose Blanche - Harbour Le Cou, Water System Upgrades" as well as a set of drawings numbered 161354, sheets SP-01 to SP-04 inclusive, C-01 to C-07 inclusive and E-01 as received from Anderson Engineering Consultants Limited on June 18, 2018 and additional information submitted on August 1 and 21, 2018.

*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

APPENDIX D  
Location Map for Permit

