

**PERMIT FOR DEVELOPMENT**

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

Date: **DECEMBER 17, 2021**

File No: **550-01-03-11-079**

Permit No: **PRO12255-2021**

Permit Holder: **GHD Limited  
1118 Topsail Road  
P.O. Box 8353  
Mount Pearl, NL A1N 5E7**  
[REDACTED]

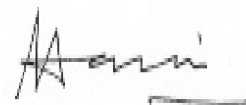
Attention: [REDACTED]

Re: **Hawke's Bay - Torrent River PPWSA - Stilling Well Site Remediation - GHD Limited**

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Permission is hereby given for : **the removal of existing hydrometric infrastructures and contaminated soil for the remediation of the hydrometric site located at Bristol's Pool in the Torrent River Protected Public Water Supply Area (used by the Town of Hawke's Bay) with reference to the application dated November 19, 2021.**

- 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

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

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**PPWSA General**

1. 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.
2. 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.
3. 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.
4. The attached Completion Report (Appendix C) for Permit No. 12255 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.
5. An undisturbed (no cutting or ground disturbance) buffer zone of at least **150 metres** shall be maintained around Torrent River for a distance of 1 kilometer upstream and 100 metres downstream of the intake, at least **75 metres** along the remainder of Torrent River, at least **50 metres** along both sides of all streams and main tributaries running into Torrent River, 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 with the exception of the areas identified for remediation. All buffer zones must be marked with signs or flagging tape to avoid encroachment into the buffer zones.
6. All waste material, excluding impacted soil, sediments and water, 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*.
7. 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.
8. 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.
9. Officials of the Department and the appropriate Municipal Authority, Operator, or Watershed Management Committee may visit the site to ensure compliance with this Permit.
10. 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, Mayor, Chair of the Local Service District Committee, or Chair of the Water Supply Committee must be notified immediately at (709)248-5216. The Environmental Scientist must also be notified immediately at **(709)637-2542**.
11. 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.

12. Motorized vehicles, including snowmobiles and ATVs, shall not be used to cross the frozen surface of the Torrent River, the intake body of water within the Protected Public Water Supply Area.
13. At least seven (7) days advance notice of the beginning and end of the planned remediation work is required. The municipal authority must be notified at (709)248-5216 and the Environmental Scientist must be notified at (709)637-2542. Any changes in the planned remediation operation must also be communicated in a timely manner, and approved with a subsequent Permit or amendment before being undertaken.
14. The proponent and Environment and Climate Change Canada are required to meet all obligations set forth in the Impacted Sites Letter dated December 8, 2021 and issued by Digital Government and Service NL with reference to the Guidance Document for the Management of Impacted Sites.
15. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.
16. This Permit is valid for six (6) months from the date of issue. If required, an application for Permit renewal must be submitted prior to the expiry date.
17. Lead and mercury based paints were identified on the former shelter at the site. As a result, soil sampling should be conducted to assess if metals impacts exist in soil surrounding the structure and to determine soil disposal options. If impacts are identified, delineation and risk assessment or remediation will be required.
18. 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.
19. Sediment samples are to be collected near the stilling well intake pipe(s). Sediment samples are to be analyzed for BTEX/TPH.
20. Confirmatory soil/sediment samples are to be collected from the limits of remedial excavation(s) and analyzed for the contaminants of concern to ensure the delineation of impacts to Tier I levels.
21. The Permit Holder is required to undertake a water quality monitoring program as outlined below, and all water quality data must be submitted to this Department, within 10 days of the samples being taken.
  - Water samples shall be collected from the intake area on Torrent River.
  - Water samples shall be collected before the remediation program begins, once per week while the program is ongoing, and approximately 10 days after the completion of the drilling project.
  - The following parameters will be included in the laboratory analysis: Alkalinity, Aluminum, Ammonia, Antimony, Arsenic, Barium, Boron, Bromide, Cadmium, Calcium, Chloride, Chromium, Colour, Conductivity, Copper, Dissolved Organic Carbon, Fluoride, Hardness, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Nitrate, Nitrite, pH, Potassium, Selenium, Sodium, Strontium, Sulphate, Total Dissolved Solids, Total Kjeldahl Nitrogen, Total Organic Carbon, Total Phosphorus, Turbidity, Uranium, Zinc, BTEX/TPH and Polycyclic Aromatic Hydrocarbons.
22. In order for an application for regulatory site closure to be considered using Atlantic RBCA Version 3, the work must be completed and reported by July 31, 2022, otherwise, Atlantic RBCA Version 4.0 and the 2021 Atlantic RBCA EQS/PSS must be used for site remediation criteria.
23. All vehicles and equipment must be clean and in good working order with no leaking fuel, oil, or other harmful substances that could impair water quality.
24. All stationary motorized equipment and associated fuel tanks, including all drill rigs, heavy equipment, pumps and generators shall have metal trays, absorbent pads or impervious liners under them to catch and contain in excess of 110 % of the aggregate volume of any fuel, lubricant and oil.

25. Any streams not visible on a 1:50,000 scale map (including field identified streams) shall require a minimum buffer of 30 m.
26. 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, except where remediation work is to occur. 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.
27. Where permits, licences, approvals or authorizations are issued by multiple governments departments or agencies, in the case of similar conditions, the more stringent of those shall prevail; in the case of conflicting conditions, the Permit Holder shall seek clarification and direction in writing from each of the respective departments or agencies.
28. The Permit Holder is required to ensure that adequate sanitary (bathroom) facilities are available or provided on site. This may be in the form of a portable toilet, chemical toilet, or municipal sewer system. If a portable toilet or chemical toilet is used, the waste water must be disposed of in a septic disposal system approved by Service NL, or 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.
29. Any vacuum trucks used to remove sediment and water from an intake body of water, the stilling well or monitoring wells must have the storage compartment disinfected and dried out prior to beginning work. All equipment that will enter the intake body of water, such as hoses, need to be specifically designated for use only in drinking water. If there are no check valves on the truck to stop water from draining from the storage compartment if the truck loses vacuum pressure, than an operator must remain with the truck to manually stop the process. The truck will not be emptied or cleaned inside the Protected Public Water Supply Area.

#### **Fuel Storage**

30. There shall be no bulk fuel storage associated with this project within the protected water supply area. Fuel shall be brought to the operating area in no more than two (2), 205 litre barrels or one (1) 500 litre slip tank, as needed. 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.
31. 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
32. Contaminated snow and 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.
33. 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 (709)637-2542 and (709)248-5216 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.
34. Refueling sites shall be located at least 150 metres from any water body or wetland.

#### **Protected Miscellaneous**

35. 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 (709)637-2542 and the appropriate Municipal Authority or Watershed Monitoring Committee at (709)248-5216.
36. 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.
37. Water, runoff or effluent must not be discharged within the Torrent River PPWSA, nor in such a manner that it has a direct surface route back to a body of water. All liquids, including but not limited to water from monitoring wells, runoff, and the stilling well, are to be removed with the use of a pump truck and disposed of outside the Protected Public Water Supply Area with the approval of Digital Government and Service NL.
38. All impacted soil and sediment must be collected and disposed of at a waste disposal site approved by Digital Government and Service NL in accordance with the Environmental Protection Act, SNL, 2002 cE-14.2. This material shall not be left on the ground. This material shall not be disposed of anywhere within a Protected Public Water Supply Area.
39. Once no longer required, all boreholes/monitoring wells at the site shall be decommissioned as outlined in the Guidance Document for the Management of Impacted Sites.
40. 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.
41. Wood and brush removed from the work site must not be stored within undisturbed buffer zones of any water body.

#### **Special Conditions**

42. The use of heavy equipment in streams or waterbodies is prohibited, including the Torrent River. The operation of heavy equipment must be confined to dry stable areas.
43. Cleaning of any equipment, including but not limited to, equipment that comes into contact with impacted water, sediment or soil, is not permitted within the Torrent River.

#### **General Alterations**

44. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
45. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.
46. 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.
47. 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.
48. 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.
49. 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.
50. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.

51. 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.
52. 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.
53. All work must be carried out within the Permit Holder's legal property boundaries.
54. Photographs must be submitted along with the completion report, showing the project site prior to and after development.

**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, 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.

- cc: Amir Ali Khan, Ph.D., P.Eng.  
Manager, Water Rights, Investigations and Modelling Section  
Water Resources Management Division  
Department of Environment and Climate Change  
P.O. Box 8700  
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- cc: Jennifer Hayward, Ph. D  
Water Resources Engineer, Hydrological Operations - east  
National Hydrological Service  
Environment and Climate Change Canada  
jennifer.hayward@ec.gc.ca
- cc: Mr. Dexter Pittman, P. Eng.  
Manager, Environmental Compliance Section  
Pollution Prevention Division  
Department of Environment and Climate Change  
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- cc: Mr. Robert Locke  
Director, Pollution Prevention Division  
Pollution Prevention Division  
Environment and Climate Change  
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- cc: Ms. Carla Hayes, P.Tech  
Environmental Scientist, Drinking Water Section  
Water Resources Management Division  
Department of Environment and Climate Change  
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- cc: Ms. Paula Dawe, P.Eng.  
Manager, Drinking Water and Wastewater Section  
Water Resources Management Division  
Department of Environment and Climate Change  
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- cc: Jeff Bannister (Western and Labrador)  
Western and Labrador Regional Lands Manager  
Crown Lands Administration Division  
Department of Fisheries, Forestry and Agriculture  
JeffBannister@gov.nl.ca



cc: Ms. Susan Hoddinott (Western/Labrador)  
Regional Director  
Digital Government and Service Newfoundland and Labrador  
PO Box 2006  
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cc: Ms. Tanya Simms  
Environmental Protection Officer  
Service NL  
Digital Government & SNL  
PO Box 2006  
Corner Brook, NL  
A2H6J8  
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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: Town of Hawke's Bay  
Ms. Nina Dredge  
P.O. Box 58  
Hawkes Bay, NL A0K 3B0  
hbcouncil@nf.aibn.com

**Appendix C - Completion Report**

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

Date: **DECEMBER 17, 2021**

File No: **550-01-03-11-079**

Permit No: **PRO12255-2021**

Permit Holder: **GHD Limited**  
**1118 Topsail Road**  
**P.O. Box 8353**  
**Mount Pearl, NL A1N 5E7**  
[REDACTED]

Attention: [REDACTED]

Re: **Hawke's Bay - Torrent River PPWSA - Stilling Well Site Remediation - GHD Limited**

Permission was given for : **the removal of existing hydrometric infrastructures and contaminated soil for the remediation of the hydrometric site located at Bristol's Pool in the Torrent River Protected Public Water Supply Area (used by the Town of Hawke's Bay) with reference to the application dated November 19, 2021.**

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

**APPENDIX D**  
**Location Map for Permit**

