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

PERMIT TO ALTER A BODY OF WATER

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

Date: **JULY 04, 2025**

File No: **527**
Permit No: **ALT14394-2025**

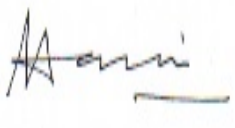
Permit Holder: **NL Hydro**
P.O. Box 12400
500 Columbus Drive
St. John's NL A1B 4K7
[redacted]

Attention: **Jackie Wells**

Re: **Lower Churchill Project - Gull Island (Multiple Waterbodies) - Geotechnical Investigation**

Permission is hereby given for : **The drilling of eleven (11) boreholes, the clearing of 0.18 ha of tree coverage for seismic lines and helicopter landing pads, and a slipway for launching and mooring a barge, and infilling of 25 m3, within and near the Churchill River for the Lower Churchill Project-Gull Island for the purpose of geotechnical investigation for a component of the Lower Churchill Project, in reference to the application received on April 17, 2025.**

- 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

Geotechnical Testing

1. The initial placement of the drill rod assembly or drill casing onto the bottom of the body of water shall be done with the minimum disturbance possible to any bottom sediment that may be present.

2. A water quality monitoring program is not required at this time. However, the Department reserves the right to require that the Permit Holder sample, analyse, and submit results of water quality tests, for the purpose of ensuring that the water quality is maintained within acceptable guidelines. All analyses must be undertaken by a CALA accredited laboratory.

3. The proponent must use existing trails, winter roads or cut lines wherever possible as access routes to limit unnecessary clearing of additional vegetation and prevent soil compaction

4. Monitoring wells and boreholes, when no longer required, must be decommissioned as specified in this Department"s policy - **Guidelines for Sealing Groundwater Wells**.

5. The work must meet the requirements of the Environmental Protection Plan (latest approved version) for the project.

6. Other than emergency repairs, all maintenance of the drill rig or other equipment, must be carried out on land, no closer than 30 metres to any body of water.

Fuel Storage

7. All spills in excess of 70 litres shall be reported immediately to the 24 hour spill report line at 1-800-563-9089.

8. Refueling sites shall be located at least 30 metres from any water body or wetland.

9. The proponent is hereby informed that an application form for fuel storage must be obtained under the Storage and Handling of Gasoline and Associated Products Regulations, 2003.

Infilling

10. The slopes along the perimeter of infilled areas must be no steeper than two horizontal to one vertical (2H:1V).

11. The constructed works must be inspected regularly so that action can be taken to undertake repairs as required.

12. 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.

13. The natural course of any stream must not be altered.

14. 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.

15. Infilling must not disrupt the established surface drainage pattern of the area.

16. Before infilling, any vegetation and topsoil must be completely removed and under no circumstances shall it be used as fill material. Topsoil must be stored and reused in final landscaping of the infilled area.

17. The constructed works must comply with all other terms and conditions provided in the Crown Lands grant, lease, or license for occupancy.

18. Select heavy rocks must be placed along the toe of any infilling to provide slope stability and erosion protection.

Explosives

19. There must be no use of ammonium nitrate-fuel mixtures in or near water due to the production of toxic by-products (ammonia).

20. All 'shock tubes' and detonation wires are to be recovered and removed after each blast.

21. If multiple charges are required, time delay detonation initiators (blasting caps) should be used to reduce the overall detonation to a series of discrete explosions. Time delays for discrete explosions should be greater than 25 ms.

22. If possible, large charges should be subdivided into a series of smaller discrete detonations or explosions using time-delay detonation initiators (a procedure known as decking) to reduce the overall detonation to a series of smaller discrete detonations or explosions.

23. Use of explosives in or within 15 m or a waterbody shall follow the Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (DFO, 1998). All underwater blasting activities must be carried out only by certified, experienced blasting consultants in accordance with all existing government regulations for such work.

24. Explosives will not be utilized in any waterbody to ensure the protection of fish and fish habitat.

25. To limit the impact on the freshwater environment, the magnitude of explosions shall be limited to only that which is absolutely necessary.

Special Conditions

26. Where feasible, silt curtains will be deployed to isolate work areas along the shoreline of a waterbody in order to keep sediment or other waste from being released into the waterbody.

Exploration

27. All drill rigs, pumps, generators, other motorized equipment and associated fuel tanks 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.

28. All silt, sludge, sediment, cuttings, drilling additives, and drilling mud must be collected, properly disposed of and not permitted to flow freely over the ground into any receiving waterbody (including wetlands). A layered risk mitigation approach is required.

29. The primary layer of risk mitigation, where physical conditions allow, shall consist of the construction of a temporary sump pit. The temporary sump pit shall be constructed on the down-slope side of the drill pad to collect discharge waters and to allow solids to settle out. In areas where it is physically impossible to dig a sump pit, a settling tank will be required. Performance of the sump pit or settling tank during operations and after heavy rainfall events should be monitored on an hourly basis and any issues reported to the Water Resources Management Division of this Department.

30. The second layer of risk mitigation shall consist of sediment traps to intercept water that may flow from the sump pit or settling tank, such as the use of constructed bales of hay or straw stacked in place used in conjunction with silt fencing. Sediment traps should be checked after heavy rain events to repair any damage and to remove accumulated sediment.

31. Should an accumulated mass of material from the drilling activity be collected by either the primary or secondary risk mitigation layer, the accumulation shall be excavated and deposited in the sump pit prior to rehabilitation.

32. Unless listed above, all conditions outlined in the Environmental Guidelines for Construction and Mineral Exploration Companies, must be strictly adhered to.

33. Drilling within a waterbody from a barge will be completed using drill casings to prevent any sediment, drilling fluid or other drill waste from being released into the waterbody. An impermeable container will be available on the barge to receive any solid or liquid drill waste generated during operations to be disposed of away from any waterbody.

34. All geotechnical equipment used within 15 meters of a waterbody will use biodegradable oils and lubricants.

General Alterations

35. Any work that must be performed below the high water mark must be carried out during a period of low water levels.

36. 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*.

37. 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.

38. 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.

39. 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.

40. 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.

41. 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.

42. 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.

43. All waste materials resulting from this project must be disposed of at a site approved by the Department of Digital Government and Service NL.

44. Care must be taken to prevent spillage of pollutants into the water.

45. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.

46. 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.

47. 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.

48. The attached Completion Report (Appendix C) for Permit No. 14394 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.

49. 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.

50. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.

51. This licence/permit does not constitute an acknowledgement of interest in any land claims adjacent.

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.

cc: Shem Evans
Hatch (NL)
80 Hebron Way, Suite 100
St. John's, NL A1A 0L9
shem.evans@hatch.com

cc: Fish and Fish Habitat Protection Program
Aquatic Ecosystems Branch
Fisheries and Oceans Canada
P.O. Box 5667
St. John's, NL A1C 5X1
dfo.fppnl-ppptnel.mpo@dfo-mpo.gc.ca

cc: Ms. Paula Dawe, P.Eng.
Manager, Water Rights, Investigations and Modelling 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
pauladawe@gov.nl.ca

cc: Mark Bugden
Senior Analyst
Executive Council
Indigenous Affairs and Reconciliation
mbugden@gov.nl.ca

cc: Labrador Lands Office
Department of Municipal Affairs
Labrador Regional Lands Office
2 Tenth Street, P.O. Box 3014 Station B
Happy Valley-Goose Bay, NL A0P 1E0
labradorlandsoffice@gov.nl.ca

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

Appendix C - Completion Report

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

Date: **JULY 04, 2025**

File No: **527**
Permit No: **ALT14394-2025**

Permit Holder: **NL Hydro**
P.O. Box 12400
500 Columbus Drive
St. John's NL A1B 4K7
jackiewells@nlh.nl.ca

Attention: **Jackie Wells**

Re: **Lower Churchill Project - Gull Island (Multiple Waterbodies) - Geotechnical Investigation**

Permission was given for : **The drilling of eleven (11) boreholes, the clearing of 0.18 ha of tree coverage for seismic lines and helicopter landing pads, and a slipway for launching and mooring a barge, and infilling of 25 m3, within and near the Churchill River for the Lower Churchill Project-Gull Island for the purpose of geotechnical investigation for a component of the Lower Churchill Project, in reference to the application received on April 17, 2025.**

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

File No: **527**
Permit No: **ALT14394-2025**

APPENDIX D
Location Map for Permit