



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: **MAY 02, 2025**

File No: **534-01**
Permit No: **ALT14299-2025**

Permit Holder: **Barite Mud Services Inc.
Station C, PO Box 5265
St. John's, NL A1C 5W1**

Attention: **Mike Rose**

Re: **Buchans Mine Dam (TP1) - Siphon System Maintenance**

Permission is hereby given for : **maintenance on the engineered siphon system including the excavation of 15 x 15 ft area (@ 1.5 ft depth) to inspect siphon and, if necessary, rejoin pipe joints as detailed in the application package submitted by Barite Mud Services Inc. on April 16, 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

General Alterations

1. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
2. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.
3. 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*.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. All waste materials resulting from this project must be disposed of at a site approved by the Department of Digital Government and Service NL.
10. 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.
11. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.
12. 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.
13. 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.
14. The attached Completion Report (Appendix C) for Permit No. 14299 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.

15. 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.
16. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.
17. This licence/permit does not constitute an acknowledgement of interest in any land claims adjacent.

Dam Construction

18. 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.
19. Reservoir shorelines with moderately steep slopes or vulnerability to wave induced erosion, must be adequately protected with armour stone, rip-rap, or by other suitable measures.
20. The reservoir side of the dam structure must be constructed with a 700 mm facing of armour stone or rip-rap with D50 = 400 mm to provide adequate protection from wave or ice induced erosion.
21. The transportation of labour and materials to the site must be along existing access roads.
22. Work must be conducted in dry conditions.

Special Conditions

23. Any work occurring within the footprint of the dams, including travel by heavy equipment, should not proceed until the entity submits a stamped design(s) or plan(s) to IET demonstrating how their proposed work would not disturb the dams, including the integrity of the various components (e.g. erosion protection, spillways, embankments, etc.). The footprint size of the dam is defined by the following: (1) The upstream limits measured equal to a distance extending out at a 4H:1V slope as measured from the upstream dam crest, where the vertical component of the ratio would be measured from the downstream height at the measurement location or a minimum crest setback distance of 10 m, whichever is greater. (2) The downstream dam limits are recommended at a distance measured equal to 10 m from the downstream toe of the dam. Any excavation work planned to occur within 50 m of the downstream toe of the dam should not occur without appropriate engineering review.
24. As this project includes excavation into the top portion of the dam structure, the work must be designed and supervised by a qualified engineer registered with Professional Engineers and Geoscientists of Newfoundland and Labrador (or equivalent Canadian organization).
25. The reason for siphons not operating properly is due to water leakage, therefore the impact of water leaking into the dam must be assessed and, if required, the proper repairs must be made to the dam structure.
26. The portion of siphons going through the dam structure should be a solid piece of pipe (i.e., joins should not be buried within the dam).
27. All post excavation repairs to the dam must be completed to the original design specifications for the dam and supervised by a qualified engineer registered with Professional Engineers and Geoscientists of Newfoundland and Labrador (or equivalent Canadian organization). The remediation/repairs to Buchans Dam #1 must be verified by a stamped engineering report that includes as-built drawings.

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: **534-01**
Permit No: **ALT14299-2025**

- 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: Keith Bradbury
Director
Mineral Development Division
Department of Industry, Energy and Technology
kbradbury@gov.nl.ca
- cc: Ms. Deneen Spracklin, P.Eng.
Manager, Drinking Water and Wastewater 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
dspracklin@gov.nl.ca



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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

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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 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

