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: **OCTOBER 04, 2022**

File No: **534-05**
Permit No: **ALT12686-2022**

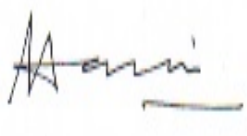
Permit Holder: **Signal Gold Inc.**
PO Box 238
Baie Verte, NL
A0K 1B0
ereid@signalgold.com

Attention: **Evelyn Reid**

Re: **Signal Gold - Point Rousse Project - Pine Cove Closure Plan for TSF1**

Permission is hereby given for : **site closure of Pine Cove Phase 1 (TSF1) dam including dewatering of TSF1, removal of decant structure, removal of exposed dam liner, re-contouring of the spillway channel, construction of the drainage channel and revegetation of TSF1 as detailed in the application from Signal Gold of July 7, 2022 and additional information provided on July 27, 2022, September 8, 2022 and September 29, 2022.**

- 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

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Environment and Climate Change

File No: **534-05**
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APPENDIX A

Terms and Conditions for Permit

Dam/Reservoir Design

1. The dam and appurtenant structures are located at the following coordinates:

Name	Latitude (deg)	Longitude (deg)
Pine Cove Phase 1 Tailings Dam	49.964597	56.124698

2. The dam and associated works must be designed and constructed under the direct supervision of an engineer eligible for membership with the Professional Engineers and Geoscientists of Newfoundland and Labrador (or equivalent Canadian organization) who is able to demonstrate competence in the design, construction, and surveillance of dams.

3. The dam and associated works shall be designed according to the Canadian Dam Association Dam Safety Guidelines and associated Bulletins (most recent edition).

Dam Construction

4. The dam and spillway must be inspected regularly to identify any indications of structural failure, leaking, erosion or other problem so that immediate action can be taken to rectify the problem.

5. De-watering of TSF1 shall be completed prior to the construction of the channel or breach of the dam.

6. Work in the exposed tailings area should be kept to a minimum and should not take place unless the surface is well dried out.

7. 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.

8. The TSF1 shall be covered with an organic cover and seeded to promote vegetative growth.

9. The transportation of labour and materials to the site must be along existing access roads.

10. Erosion control features are to be removed and disposed of upon completion of the work.

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

Dam Safety

12. The dam has been conditionally classified in the HIGH Consequence category based on the 2007 Canadian Dam Association (CDA) guidelines. To meet the CDA's Dam Safety guidelines (Current Edition) for dams of this classification, the owner must:
    - Carry out an annual Dam Safety Inspection and provide the results to this Department,
    - Carry out a Dam Safety Review and submit a Dam Safety Report to this Department a maximum of every **seven years**,
    - Develop an Operation, Maintenance and Surveillance (OMS) Manual for the closure phase,
    - Prepare an Emergency Preparedness Response Plan (EPRP).

Special Conditions

13. A short and long term monitoring plan shall be submitted to this Department.

14. The dam will not be considered fully decommissioned and reclassified until the dam owner has been able to demonstrate the physical, chemical, ecological and social stability of the decommissioned structure.

Stream Diversion Design

15. An approximately 1000 metre long permanent diversion channel may be excavated to divert and redirect waters from the Pine Cove TSF1.

16. The new channel must provide adequate capacity to safely discharge flood flows at a velocity no greater than that which would occur in the natural channel.

17. The stream diversion must have the following dimensions:

Bottom Width (m)	Depth of Channel (m)	Bank Slope (H:V)	Flow Area (m^2)	Bed Slope (%)
5.0	2-6	2H:1V	12	0.5-2.0

18. To safely convey peak flows, the stream diversion must be designed according to the following hydraulic criteria:

Design Return Period (years)	Maximum Flow Capacity (m^3/s)	Maximum Flow Velocity (m/s)
100	13.2	2.13

Stream Diversion Construction

19. The Permit Holder must prevent erosion of drainage ditches, streams or other natural bodies of water by installing rip-rap and/or sodding.

20. The drainage channel through TSF1 and TSF2 must have a non-woven geotextile placed under a 0.5 m thick rockfill base to provide adequate protection from erosion.

21. The channels at 0-500 and 0-850 must be constructed with rip-rap of D50 = 850 mm to provide adequate protection from erosion.

22. The new channel must be excavated in the dry beginning from the downstream end.

23. Flow must not be diverted into the new channel until all excavation, lining and bank stabilization work has been completed. Water from the old channel must be diverted into the new channel gradually. The channel must be monitored visually for any indications of excessive erosion or other problems.

24. The channel, including any areas up to the high water mark, must be kept free of all excavated or unused construction materials at all times.

25. The channel must be inspected regularly and maintained to ensure that there is no erosion of the channel. Any debris causing a blockage must be removed when necessary.

General Alterations

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

27. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.

28. 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*.

29. 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.

30. 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.

31. 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.

32. 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.

33. 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.

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

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

36. 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.

37. The attached Completion Report (Appendix C) for Permit No. 12686 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.

38. 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. The following term(s) are valid for the life cycle of the structure: 4, 12.

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

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Environment and Climate Change

File No: **534-05**
Permit No: **ALT12686-2022**

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: Ms. Deneen Spracklin, P.Eng.
Environmental Engineer, 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

cc: Ms. Paula Dawe, P.Eng.
Manager, Drinking Water and Wastewater Section
Water Resources Management Division
Department of Environment and Climate Change
P.O. Box 8700
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St. John's, NL A1B 4J6
pauladawe@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

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: **OCTOBER 04, 2022**

File No: **534-05**
Permit No: **ALT12686-2022**

Permit Holder: **Signal Gold Inc.**
PO Box 238
Baie Verte, NL
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Attention: **Evelyn Reid**

Re: **Signal Gold - Point Rousse Project - Pine Cove Closure Plan for TSF1**

Permission was given for : **site closure of Pine Cove Phase 1 (TSF1) dam including dewatering of TSF1, removal of decant structure, removal of exposed dam liner, re-contouring of the spillway channel, construction of the drainage channel and revegetation of TSF1 as detailed in the application from Signal Gold of July 7, 2022 and additional information provided on July 27, 2022, September 8, 2022 and September 29, 2022.**

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