



GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR
Department of Environment and Climate Change

CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL 2002 c E-14.2 Section 83

Issue Date: *September 26, 2022*

Approval No. AA22-095690

Expiration: *September 26, 2027*

File No. 735.430

Proponent: **Marathon Gold Corporation**
P.O. Box 4006
Mount Pearl, Newfoundland
A1N 0A1


Attention: James Powell - VP, Regulatory and Government Affairs

Re: **Valentine Gold Project (Early Works)**

Approval is hereby given for early works associated with the open pit gold mine project near Valentine Lake, located approximately 60 km south of the Town of Millertown, Newfoundland and Labrador.

This Certificate of Approval does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Nothing in this Certificate of Approval negates any regulatory requirement placed on the proponent. Where there is a conflict between conditions in this Certificate of Approval and a regulation, the requirement in the regulation shall take precedence. Approval from the Department of Environment and Climate Change shall be obtained prior to any significant change in the design, construction, installation, or operation of the Valentine Gold Project (Early Works), including any future expansion of the Valentine Gold Project (Early Works). This Certificate of Approval shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the proponent without obtaining prior approval from the Minister.

This Certificate of Approval is subject to the terms and conditions as contained therein, as may be revised from time to time by the Department. Failure to comply with any of the terms and conditions may render this Certificate of Approval null and void, may require the proponent to cease all activities associated with this Certificate of Approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, and will make the proponent responsible for taking such remedial measures as may be prescribed by the Department. The Department reserves the right to add, delete or modify conditions to correct errors in the Certificate of Approval or to address significant environmental or health concerns.


For MINISTER

TERMS AND CONDITIONS FOR APPROVAL No. AA22-095690

September 26, 2022

General

1. This Certificate of Approval is for early works (clearing, grubbing, earthworks, accommodations complex, sewage and water treatment plants, access road upgrades, haul road development, fleet mobilization and assembly, partial construction of permanent settling ponds and freshwater pump intake) associated with the Valentine Gold Project (Early Works) as per plans and specifications supplied by Marathon Gold Corporation for this Certificate of Approval. Extensive future expansion or change of activities will require a separate Certificate of Approval.
2. Any inquiries concerning this Approval shall be directed to the Western Regional Office of the Pollution Prevention Division (telephone: (709) 643-6114; or facsimile: (709) 643-8654).
3. In this Certificate of Approval:
 - **accredited** means the formal recognition of the competence of a laboratory to carry out specific functions;
 - **associated product** means petroleum or a derivative of it, except gasoline, which is in a liquid state at ambient temperature and pressure;
 - **Department** means the Department of Environment and Climate Change and its successors;
 - **DGSNL** means Digital Government and Service NL and its successors;
 - **EDMS** means Environmental Data Management System;
 - **hazardous waste** means a product, substance or organism that is intended for disposal or recycling, including storage prior to disposal or recycling, and that:
 - (a) is listed in Schedule III of the *Export and Import of Hazardous Waste Regulations under the Canadian Environmental Protection Act, 1999*;
 - (b) is included in any of Classes 2 to 6, and 8 and 9 of the *Transportation of Dangerous Goods Regulations* under the *Transportation of Dangerous Goods Act, 1992*; or
 - (c) exhibits a hazard classification of a gas, a flammable liquid, an oxidizer, or a substance that is dangerously reactive, toxic, infectious, corrosive or environmentally hazardous;
 - **leak or leakage** means any discharge of gasoline, associated product, used oil or used glycol from a storage tank system, pipeline, tank vessel, tank car or tank vehicle, other than through the usual function for which the storage tank system, pipeline, tank vessel, tank car or tank vehicle was designed;
 - **licensed** means has a Certificate of Approval issued by the Minister to conduct an activity;

- **liquid waste** is defined by the *Slump Test* (Canadian Standards Association test method A23.2-5C for determining the slump of concrete). The liquid waste slump test involves placing the waste in a 30 cm open inverted cone. The cone is removed and the immediate decrease (slump) in height of the waste material is measured. If the material slumps such that the original height is reduced by 15 cm or more, the waste is considered liquid;
- **malfunction** means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, wastewater treatment equipment, process equipment, or a process to operate in a normal or usual manner. Failures, caused in part by poor maintenance or careless operation, are not malfunctions;
- **Marathon** means Marathon Gold Corporation;
- **Minister** means the Minister of the Department;
- **oil separator** means a device used to separate and remove oily wastes from oil and water mixtures;
- **proficiency testing** means the use of inter-laboratory comparisons to determine the performance of individual laboratories for specific tests or measurements;
- **QA/QC** means Quality Assurance/Quality Control;
- **register(ed)**, in the context of storage tanks, means that information regarding the storage tank system has been submitted to a DGSNL office and a registration number has been assigned to the storage tank system.
- **regulated substance** means a substance subject to discharge limit(s) under the *Environmental Control Water and Sewage Regulations, 2003*;
- **Site Professional** means an individual who is registered with the Department to oversee environmental site assessment, remediation and contaminated site management work in Newfoundland and Labrador;
- **spill or spillage** means a loss of gasoline, associated product, used oil or used glycol in excess of 70 litres from a storage tank system, pipeline, tank vessel or vehicle, or an uncontrolled release of any volume of a regulated substance onto or into soil or a body of water;
- **storage tank system** means a tank and all vent, fill and withdrawal piping associated with it installed in a fixed location and includes a temporary arrangement;
- **TDS** means total dissolved solids;
- **TSS** means total suspended solids;
- **used glycol** means glycol that, through use, storage or handling, can no longer be used for its original purpose; and

- **used oil** means oil that, through use, storage or handling, can no longer be used for its original purpose.
4. All necessary measures shall be taken to ensure compliance with all applicable acts, regulations, policies, guidance documents and guidelines, including the following, or their successors:
- *Environmental Protection Act;*
 - *Water Resources Act;*
 - *Air Pollution Control Regulations, 2022;*
 - *Environmental Control Water and Sewage Regulations, 2003;*
 - *Halocarbon Regulations;*
 - *Storage and Handling of Gasoline and Associated Products Regulations, 2003;*
 - *Used Oil and Used Glycol Control Regulations;*
 - *Accredited Laboratory Policy; and*
 - *Guidance Document for the Management of Impacted Sites.*

This Approval provides terms and conditions to satisfy various requirements of the above listed acts, regulations, policies, guidance documents and guidelines. If it appears that any of the pertinent requirements of these acts, regulations, policies and guidelines are not being met, then a further review of the works shall be conducted, and suitable pollution control measures may be required by the Minister.

5. All reasonable efforts shall be taken to minimize the impact of the operation on the environment. Such efforts include:
- minimizing the area disturbed by the operation,
 - minimizing air, water or soil pollution,
 - finding alternative uses, acceptable to the Department, for waste or rejected materials,
 - removing equipment or structures when they no longer have further use, and
 - considering the requirement for the eventual rehabilitation of disturbed areas when planning the development of any area on the facility property.
6. **Marathon** shall provide to the Department, within a reasonable time, any information, records, reports or access to data requested or specified by the Department.
7. **Marathon** shall keep all records or other documents required by this Approval at the Valentine Gold Mine location for a period of not less than three (3) years, beginning the day they were made. These records shall be made available for review by officials of the Department or DGSNL when requested.
8. Should **Marathon** wish to deviate in any way from the terms and conditions of this Certificate of Approval, a written request detailing the proposed deviation shall be made to the Minister. **Marathon** shall comply with the most current terms and conditions until the Minister has authorized otherwise. In the case of meeting a deadline requirement, the request shall be made at least 60 days ahead of the applicable date as specified in this Approval or elsewhere by the Department.

Activities Affecting Bodies of Water

9. Any work that must be performed in a body of water below the high water mark shall be carried out during a period of low water levels, unless otherwise permitted in writing by the Department.
10. All construction operations shall be carried out in a manner that minimizes damage to land, vegetation, and watercourses, and which prevents the discharge of substances, to bodies of water, in excess of applicable regulatory limits.
11. The use of heavy equipment shall be confined to dry stable areas and shall not be carried out in streams or bodies of water, unless otherwise permitted in writing by the Department.
12. All vehicles and equipment shall be in good repair, and shall be free of leaks of oil or other harmful substances that could impair water quality.
13. During the construction of concrete components, formwork shall 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.
14. Waste hardened concrete shall not be disposed as unsuitable material at the project site. Waste hardened concrete shall be put to beneficial use on site as fill material, or it shall be sent to an approved waste disposal site.
15. All areas affected by this project shall 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 necessary in the opinion of this Department.
16. Prior written permission is required from the Department for all work that takes place within 15 metres of a body of water, including but not limited to bridges, culverts, fording, stream modifications, infilling and dredging.

Environmental Protection Plan

17. **Marathon** shall implement the most recent version of the Valentine Gold Project: Construction Environmental Protection Plan (*August 25, 2022*). This Plan shall be reviewed annually and revised as necessary, accounting for expanding or alteration of activities. All proposed revisions shall be submitted to the Department for review.

Waste Management

18. The management of waste generated at the facility is subject to compliance with the *Environmental Protection Act*. All non-industrial waste shall be stored in a manner acceptable to the Department and, on at least a weekly basis, be disposed of:

- at an authorized waste disposal site, with the permission of the owner/operator of the site; or
- by some other means acceptable to the Department.

If required, industrial waste shall be disposed of by a licensed operator.

19. **Marathon** shall ensure that all volatile chemical and solvent wastes, if they cannot be reused, are placed in suitable covered containers for disposal in a manner acceptable to the Department. Disposal of liquid wastes at waste disposal sites in the province is not permitted.
20. Disposal of hazardous waste in a municipal or regional waste disposal site in this Province is prohibited. Transporters of hazardous waste shall have an Approval issued by the Minister. Those generating hazardous waste shall have a waste generator's number issued by the Department and shall also complete the required information outlined in the Waste Manifest Form.

Waste Management Plan

21. **Marathon** shall continue to implement the Waste Management Plan (*July 2022*) for their Valentine Gold Project (Early Works), including all revisions. Every year the Plan shall be reviewed and revised as necessary, accounting for expanding or alteration of activities. All proposed revisions shall be submitted to the Department for review.

Burning Prohibition

22. Materials listed in Table 1 shall not be burned in a fire, unless the burning of the material is recommended, in writing, by the Office of the Fire Commissioner or the burning occurs in combustion process equipment that has been approved, in writing, by the Department for that purpose.

| Table 1 - Materials Prohibited from Burning in a Fire | |
|--|---|
| (a) tires | (k) manure |
| (b) plastics | (l) rubber |
| (c) treated lumber | (m) tar paper |
| (d) asphalt and asphalt products | (n) railway ties |
| (e) drywall | (o) paint and paint products |
| (f) demolition waste | (p) fuel and lubricant containers |
| (g) hazardous waste | (q) used oil |
| (h) biomedical waste | (r) animal cadavers |
| (i) domestic waste | (s) hazardous substances |
| (j) trash, garbage, or other waste from commercial, industrial or municipal operations | (t) materials disposed of as part of the removal or decontamination of equipment, buildings or other structures |

23. The Department shall be notified prior to the burning of any materials not listed in Table 1.

Noise

24. Efforts shall be made to minimize and control noise resulting from the Valentine Gold Project (Early Works) operations and maintenance activities. All vehicles operating within the facility shall have exhaust and muffling devices in good working order.

Dust Suppression

25. **Marathon** shall control dusting resulting from construction and operational activities at the site. Use of dust suppressants other than water or calcium chloride shall require approval of the Department. **Marathon** are encouraged to use best management practices when applying calcium chloride or any other approved dust suppressant.

Spill and Leak Prevention and Containment

26. All on site storage of petroleum shall comply with the *Storage and Handling of Gasoline and Associated Products Regulations, 2003*, or its successor. Storage tank systems shall be registered with DGSNL.
27. Refuelling and maintenance of vehicles and equipment shall, whenever possible, be undertaken on a prepared impermeable surface with a containment or collection system for spills or leaks of fluids (eg. hydrocarbons, coolants and other associated fluids). When this is not possible, due care shall be taken to prevent spillage on the ground and to the surrounding environment, particularly streams and other water bodies. The Contingency Plan for Valentine Gold Project (Early Works) shall detail the specific response actions in the event of a spill from refuelling or maintenance activities.

Contingency Plan

28. **Marathon** shall continue to implement the Contingency Plan (*July 2022*) for their Valentine Gold Project, including all revisions. This Plan describes the actions to be taken in the event of a spill or leak of a toxic or hazardous material. Copies of the Plan shall be placed in convenient areas throughout the facility so that employees can easily refer to it when needed. **Marathon** shall ensure that all employees are aware of the Plan and understand the procedures and the reporting protocol to be followed in the event of an emergency. An annual response exercise is recommended for response personnel. Every year, as a minimum, the Plan shall be reviewed and revised as necessary. Any proposed significant revisions shall be submitted to the Department for review. Changes which are not considered significant include minor variations in equipment or personnel characteristics which do not affect implementation of the Plan.

29. Every time **Marathon** implements the Contingency Plan, information shall be recorded for future reference. This will assist in reviewing and updating the Plan. The record is to consist of all incidents with environmental implications, and include such details as:
- date;
 - time of day;
 - type of incident;
 - actions taken;
 - problems encountered; and
 - other relevant information that would aid in later review of the Plan performance.

Each incident report shall be submitted to the Department as per the **Reporting** section.

Rehabilitation and Closure

30. The Early Works Development and Rehabilitation and Closure Plan detailing the actions to be taken to restore areas disturbed by the operation has been submitted to the Department (**August 26, 2022**). The Plan shall be implemented progressively as required and completed upon site closure.
31. As part of the site decommissioning and restoration process, **Marathon** shall employ a registered Site Professional to complete a site-wide environmental site assessment, as defined in the **Guidance Document for the Management of Impacted Sites**. Should impacts be identified, **Marathon** shall proceed through the process outlined in the Guidance Document to achieve regulatory site closure.

Used Oil and Used Glycol

32. Used oil and used glycol shall not be mixed and shall be stored in separate:
- closed containers;
 - registered tanks; or
 - tanks that have an active approval from DGSNL.
33. Where greater than 205 litres of used oil or used glycol is stored in one or more containers, the storage shall require approval from the Department or DGSNL.
34. Used oil and used glycol shall be disposed of by a company licensed for the handling and disposal of such products.
35. The use or operation of an oil separator requires registration under the **Used Oil and Used Glycol Control Regulations**. Applications for registration shall be submitted to, and registration numbers are assigned by, DGSNL.

Water Chemistry Analysis

36. Four times per calendar year and not less than 30 days apart, **Marathon** shall perform Water Quality Analysis as per Table 2. Analytical results shall be submitted as per the **Reporting** section.

Table 2 - Water Chemistry Analysis Program

| Ref. | Location | EDMS Location Code | Parameters |
|------------------|-------------------------------------|--------------------|--|
| MA-WQP-01A | Stream VAL-2 | 00873 | General Parameters: temperature, dissolved oxygen (DO), nitrate + nitrite, nitrate, nitrite, pH, TSS, colour, sodium, potassium, calcium, sulphide, magnesium, ammonia, alkalinity, sulphate, chloride, turbidity, reactive silica, orthophosphate, phosphorous, DOC, conductance, TDS (calculated), phenolics, carbonate (CaCO ₃), hardness (CaCO ₃), bicarbonate (CaCO ₃) Metals Scan: aluminum, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, mercury, nickel, selenium, silver, strontium, thallium, tin, titanium, uranium, vanadium, zinc |
| MA-WQP-01B | Stream VAL-3 | 00874 | |
| MA-WQP-03 | Stream VIC-6 | 00875 | |
| MA-WQFP-45 | Stream VIC-8 | 00876 | |
| LP-WQP-01 | Stream VIC-26 | 00877 | |
| LP-WQP-02 | Victoria Lake Reservoir | 00878 | |
| LP-WQFP-03 | Stream VIC-16 | 00879 | |
| LP-WQP-05 | Pond VIC-P2 | 00880 | |
| PP-WQP-01 | Victoria Lake Reservoir | 00881 | |
| PP-WQP-02 | Pond L2 | 00882 | |
| RQP-VAL01 | Valentine Lake | 00883 | |
| RQP-VIC01 | Victoria Lake | 00884 | |
| WFP-HS8 | Stream VIC-9 | 00885 | |
| WFP-HS9 | Pond VAL-P3 Outlet | 00886 | |
| RQFP-34 | Stream Crossing 34 | 00887 | |
| NLECC-VL-Outflow | Valentine Lake Outflow | 00888 | |
| NLECC-VR-PIT | Victoria River | 00889 | |
| 19-MW7 | Marathon Area | 00890 | |
| 19-MW8 | Marathon Area | 00891 | |
| 20BH-15A | Marathon Area | 00892 | |
| 20BH-15B | Marathon Area | 00893 | |
| 20BH-16 | Marathon Area | 00894 | |
| 20BH-20 | Marathon Area | 00895 | |
| 19-MW2 | TMF/Plant Site | 00896 | |
| 19-MW4 | TMF/Plant Site | 00897 | |
| 20BH-24 | TMF/Plant Site | 00898 | |
| 20BH-25 | TMF/Plant Site | 00899 | |
| 20BH-29 | TMF/Plant Site | 00900 | |
| 20BH-30 | TMF/Plant Site | 00901 | |
| 20BH-31 | TMF/Plant Site | 00902 | |
| 21BH-MW-02 | TMF/Plant Site | 00903 | |
| 20BH-09 | TMF/Plant Site | 00904 | |
| 21BH-GLDR-14 | TMF/Plant Site | 00905 | |
| 19-MW3 | Leprechaun Area | 00906 | |
| 19-MW6 | Leprechaun Area | 00907 | |
| 20BH-35A | Leprechaun Area | 00908 | |
| 20BH-35B | Leprechaun Area | 00909 | |
| 20BH-37 | Leprechaun Area | 00910 | |
| GWRT-Station 1 | South of Leprechaun Pit | 00911 | |
| GWRT-Station 2 | Down gradient of TMF (Shallow Well) | 00912 | |
| GWRT-Station 3 | Down gradient of TMF (Deep Well) | 00913 | |
| GWRT-Station 4 | Northwest of Leprechaun Pit | 00914 | |

37. **Marathon** may discontinue testing for mercury if the mercury concentration in the effluent is less than 0.10 ug/L in 12 consecutive quarterly samples. **Marathon** shall notify the Department in writing, at least 30 days in advance of a reduction in the frequency of testing.

Analysis and QA/QC

38. Unless otherwise stated herein, all solids and liquids analysis performed pursuant to this Approval shall be done by either a contracted commercial laboratory or an in-house laboratory. Contracted commercial laboratories shall have a recognized form of accreditation. In-house laboratories have the option of either obtaining accreditation or submitting to an annual inspection by a representative of the Department, for which **Marathon** shall be billed for each laboratory inspection in accordance with Schedule 1 of the *Accredited Laboratory Policy (PD:PP2001-01.2)*. Recommendations of the Department stemming from an annual inspection shall be addressed within six months, otherwise further analytical results shall not be accepted by the Department.
39. The exact location of each sampling point shall remain consistent over the life of the monitoring programs, unless otherwise approved by the Department. Using a GPS or similar device, the northing and easting of each sampling location shall be recorded and submitted by to the Department.
40. **Marathon** shall bear all expenses incurred in carrying out the environmental monitoring and analysis required under conditions of this Approval.

Monitoring Alteration

41. The Department has the authority to alter monitoring programs or require additional testing at any time when:
- pollutants might be released to the surrounding environment without being detected;
 - an adverse environmental effect may occur; or
 - it is no longer necessary to maintain the current frequency of sampling and/or the monitoring of parameters.
42. **Marathon** may, at any time, request that monitoring programs or requirements of this Approval be altered by:
- requesting the change in writing to the Department; and
 - providing sufficient justification, as determined by the Department.

The requirements of this Approval shall remain in effect until altered, in writing, by the Department.

Reporting

43. Monthly reports containing the environmental compliance monitoring and sampling information required in this Approval shall be received by the Department in digital format within 30 calendar days of the reporting month. All related laboratory reports shall be submitted with the monthly report in Extensible Markup Language (XML) format and Adobe Portable Document Format (PDF). Digital report submissions shall be uploaded through the EDMS web portal.
44. Each monthly report shall include a summary of all environmental monitoring components and shall include an explanation for the omission of any requisite data. The monthly summary reports shall be in Microsoft Word or Adobe PDF and shall be uploaded through the EDMS web portal with the data submissions.
45. All incidents of:
- *Contingency Plan* implementation; or
 - non-conformance of any condition within this Approval; or
 - spillage or leakage of a regulated substance; or
 - verbal or written complaints of an environmental nature received from the public by **Marathon** and related to the Valentine Gold Project (Early Works), including complaints submitted anonymously;

shall be immediately reported, within one working day, to the Department.

A written comprehensive incident report, including a detailed description of the incident, a summary of contributing factors, and an Action Plan to prevent future incidents of a similar nature, shall be prepared. The report shall include a description of actions already taken and future actions to be implemented, and shall be submitted to the Department within 30 days of the date of the initial incident.

46. Any spillage or leakage of:
- gasoline or associated product from a vehicle, pipeline or storage tank system;
or
 - used oil or used glycol from a storage tank system;

shall be reported immediately through the Environmental Emergencies 24-hour report line at 1-800-563-9089.

Expiration

47. This Certificate of Approval expires *September 26, 2027*.

cc: Mr. Gary Kennell
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