



Impact Assessment
Agency of Canada

Agence d'évaluation
d'impact du Canada

Newfoundland and Labrador Satellite Office
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St. John's NL A1C 6M1

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301-10 Barter's Hill
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February 15, 2022

Sent by E-mail

Tara Oak
Manager, Environmental Assessment
Marathon Gold Corporation
PO Box 4006, Pearlgate PO
Mount Pearl NL A1N 0A1
Email: toak@marathon-gold.com

Dear Ms. Oak,

SUBJECT: Outcome of the Technical Review of the response to Information Requirement #3 of the Valentine Gold Project Environmental Impact Statement

The Impact Assessment Agency of Canada (Agency) has completed the technical review of the responses to Information Requirements issued on November 22, 2021 for the Valentine Gold Project (the Project) and determined that additional information is required to proceed with the environmental assessment (EA).

To facilitate the EA, the Agency has prepared additional information requirements (IRs), contained in the attached table, in consultation with Natural Resources Canada.

With the issuance of this fourth round of IRs, the federal timeline within which the Minister of Environment and Climate Change must make a decision is paused as of February 15, 2022. Once Marathon Gold Corporation has submitted responses, the Agency will determine if the information provided is complete and the timeline for the environmental assessment will resume. For further information, please consult the Agency document on Information Requests and Timelines: [Information Requests and Timelines - Canada.ca](#)

The responses to IRs may be in a format of your choice; however, the format must be such that the responses to individual IRs can be easily identified. You may wish to discuss certain IRs with the Agency or other government experts, as necessary, to obtain clarification or additional information, prior to submission of the responses. Working directly with government experts in this manner will help to



ensure that IRs are responded to satisfactorily. The Agency can assist in arranging meetings with government experts, at your request.

The IRs and your responses will be made public on the Canadian Impact Assessment Registry Internet site: [Valentine Gold Project - Canada.ca \(iaac-aeic.gc.ca\)](http://Valentine Gold Project - Canada.ca (iaac-aeic.gc.ca)).

Please confirm receipt of this message and contact me if you require further information.

Sincerely,

<Original signed by>

Brent Keeping
Project Manager, Impact Assessment Agency, Newfoundland and Labrador Satellite Office,
Atlantic Region

Cc: Jerry Pulchan - Environment and Climate Change Canada
Tonya Warren - Fisheries and Oceans Canada
Ryan Pugh – Fisheries and Oceans Canada
Walker Smith - Natural Resources Canada
Jason Flanagan - Transport Canada
Julie Boudreau - Health Canada
Dae Young Lee – Health Canada
Eric Watton – Environment and Climate Change
Joanne Sweeney – Environment and Climate Change

Attachment:

Attachment 1 – Round Four Information Requirements for the Valentine Gold Project.

**Valentine Gold Project
Information Requirements – Round Four
February 15, 2022**

INTRODUCTION

The Impact Assessment Agency of Canada (the Agency), with input from government experts, has completed its technical review of Marathon Gold Corporation's responses to Information Requirements issued on November 22, 2021 for the Valentine Gold Project. The Agency has determined that additional information is required, as per the table below.

ATTACHMENT 1: ROUND FOUR INFORMATION REQUIREMENTS FOR THE VALENTINE GOLD PROJECT

Information Requirements

IR -3 Ref. #	IR #4 Number	Project Effects Link to CEEA 2012	Reference to EIS (including appendices)	Context and Rationale	Specific Question/ Proposed Follow-up Measure
IR(2)-11 IR(2)-12 IR(2)-14 IR(2)-15	IR(4)-11	5(1)(a)(i) Fish and Fish Habitat	Appendix 6A, Sections 4.3.3, 4.3.4, 4.4,5.2.1.3, 5.3.1.2, 5.2.2, and 5.3.2, Tables 4-2, 4-3, 5-1, 5-2, 5-3, 5-4, 5-6, and 5-7, Figures 4.1, 4.2, 4.3, 4.4 5.2 and 5.4	<p>Context and Rationale:</p> <p>To reduce inconsistencies within the numerical groundwater model, as described in IR(3)-11, the Proponent has presented an acceptable update to the calibration of the model. The model results presented in response to IR(3)-11 resolve many of the issues with the modelling results raised in IR(2)-11, -12, -14, -15.</p> <p>However, the Proponent has not provided information regarding the effect of the updated modelling on the seepage discharge points and seepage discharge rates from the tailings management facilities (TMF), waste rock, and low grade ore stockpiles. The effect of the updated calibration on these results is required to understand changes to groundwater fluxes (as per Section 7.2.2 of the EIS Guidelines), and subsequently impacts to surface water, and fish and fish habitat.</p> <p>Additional Detail:</p> <p>As noted in IR(2)-11, and shown in the response Table IR(2)-11.1 (e.g. for watercourse NT3), the reporting of net flux values for MODFLOW RIVER boundaries can mask numerical instability in the results. To support the assessment of groundwater-surface water interactions, as they relate to fish and fish habitat, model results for RIVER boundaries should be presented as flux into the model and flux out of the model, along with net flux.</p> <p>Based on the updated model results, which show a reduction in simulated baseline groundwater discharge to surface water, the proponent has determined that the assessment of effects to groundwater quantity are unchanged from the original EIS. Following that conclusion, the updated results were not carried forward through the assessment of surface water and fish and fish habitat. The description of the model updates and presentation of the updated model results are not sufficient to confirm this approach.</p> <p>Although the model updates resulted in reductions to baseline groundwater seepage to surface relative to the EIS, no apparent updates were made to the numerical representation of the waste rock storage and TMF. Should that be the case, seepage quantity from these facilities is expected to be the same as those presented in the EIS, and would then comprise a larger portion of the total groundwater discharge to surface water, with potential implications for surface water and fish and fish habitat.</p> <p>To support the conclusions of the assessment, groundwater balances should be provided for the waste rock storage and TMF (i.e., a description of the recharge to the facilities, the simulated seepage quantity, and the seepage discharge locations (including the ditch network)). Maps showing particle tracking results should accompany the flow balances. Results should be presented for both operations and post-closure conditions.</p>	<p>For waterbodies represented using the MODFLOW RIVER boundary in the updated model, provide a complete groundwater flow balance as provided in response to IR(2)-11, Table IR(2)-11.1.</p> <p>For the end of operations and post- closure conditions provide groundwater balances for the waste rock and tailings management facilities that include:</p> <ol style="list-style-type: none"> Recharge into the facility Seepage quantity from the facility Seepage discharge locations (including the ditch network), and the proportion of the total seepage discharging at each location <p>Provide particle tracking results in plan view for the end of operations and post-closure conditions.</p> <p>To further clarify the items listed above, the Proponent should provide updated versions of the following from Appendix 6A of the EIS:</p> <ul style="list-style-type: none"> Figures 5-3 and 5-5 (with TMF particle tracks, as provided for previous IR responses) Tables 5-4 and 5-7 (with TMFseepage proportions)