



June 24, 2022

Valentine Gold Project  
Impact Assessment Agency of Canada  
301-10 Barbers Hill  
St. John's, NL A1C 6M1  
Telephone (709) 725-2725  
[valentine@iaac-aeic.gc.ca](mailto:valentine@iaac-aeic.gc.ca)

**Re: *Draft Environmental Assessment Report and Potential conditions under the Canadian Environmental Assessment Act, 2012 for the Valentine Gold Project in Newfoundland, IAAC registry number 80169***

MiningWatch Canada has reviewed the above-referenced documents and is pleased to provide the following comments. They are focused on the issues we raised in the assessment process, principally regarding hydrogeological and geochemical concerns. There remain significant gaps that are not adequately addressed by the recommended conditions, and in a number of respects, there is not adequate evidence to support the Impact Assessment Agency of Canada's conclusion in the *Draft Environmental Assessment Report* that "taking into account the implementation of mitigation measures, the Project is not likely to cause significant adverse environmental effects as defined in CEAA 2012."

We are also deeply concerned that the *Draft Environmental Assessment Report* states that "[t]he Agency acknowledges that the Project would result in adverse effects on caribou."<sup>1</sup> Those impacts are acknowledged to be potentially significant. How can this not impede the conclusion that the project is "not likely to cause significant adverse environmental effects"?

MiningWatch Canada contracted Jim Kuipers, P.E., to prepare detailed comments on the Environmental Impact Statement for the Valentine Gold Project.<sup>2</sup> The proponent's responses to those comments vary in completeness and rigour, and in several areas do not provide sufficient assurance that adverse environmental effects can be avoided or mitigated so as to meet the standard of "significant adverse environmental effects" as defined in CEAA 2012.

We would like to highlight the following gaps:

***Tailings management – safety***

We note that the possibility of dam breach has not been sufficiently accounted for. Our submission

---

<sup>1</sup> Impact Assessment Agency of Canada, *Draft Environmental Assessment Report – Valentine Gold Project*, May 2022. p.114

<sup>2</sup> J. Kuipers P.E., *Valentine Gold Project EIS Comments*, on behalf of MiningWatch Canada, December 2020.

pointed out that the EIS should include a breach inundation analysis and breach effects analysis. The proponent acknowledged that “a detailed Failure Modes Effects Analysis was not presented,” justifying this on the basis that “the TMF design report (see Appendix 2B of the EIS) explained that foundation failures were reviewed and rejected as a credible failure mode.”<sup>3</sup> However, no evidence is provided in the Dam Breach Assessment and Inundation Study that any investigation was undertaken to confirm this assumption.<sup>4</sup> The proponent subsequently provided a supplemental dam breach assessment<sup>5</sup> identifying volumes of potential release of tailings, but with no effects analysis or contingency plan, and no evidence of any characterisation of the proposed tailings dam foundation.

We would further note that while Potential Condition 10.1.1 specifies that the Proponent shall “design, construct and operate the tailings management facility dams taking into account the Canadian Dam Association’s *Dam Safety Guidelines* and the Mining Association of Canada’s *Guide to the Management of Tailings Facilities*,” it does not specifically require that the proponent actually adhere to those guidelines, nor does it refer directly to the *Global Industry Standards on Tailings Management* (GISTM). While the GISTM is referenced in the Mining Association of Canada’s guidelines, it should be referenced directly. Nor does the Potential Condition prescribe that the proponent should also meet the more stringent requirements of the civil society *Safety First: Guidelines for Responsible Mine Tailing Management*, now in its second edition.<sup>6</sup>

### ***Tailings management – in-pit disposal***

The proponent has also failed to address the potential for in-pit tailings disposal afforded by mining the two orebodies in sequence, rather than simultaneously. The engineered tailings impoundment will be used for the first nine years of operation; in-pit disposal will be used for the remaining four years of operation. The question this begs is why the alternative of mining the pits in sequence was not considered, to allow all the tailings from processing the Marathon orebody to be deposited in the mined-out Leprechaun pit. This would not necessarily eliminate the need for engineered in-pit containment measures to prevent contaminant seepage into ground and surface water, but it would reduce the need for above-surface disposal, reducing the hydraulic head of any water getting into the tailings, the volume of any potential spill, and the long-term risks of erosion.

The EIS indicates that this option “was not considered feasible based on the need to mine both pits simultaneously and the distance between the two pits,”<sup>7</sup> but provides no justification for the “need” to mine both pits simultaneously. The assessment is incomplete without an analysis of this option, which the proponent has apparently ruled out as economically disadvantageous without presenting any rationale for this position that would allow its costs to be assessed against a range of benefits that it could provide, including diminished environmental risks but also increased and prolonged socio-economic benefits to the region such as increased stability and longer horizons for local employment and contracting.

It should be noted that the Voisey’s Bay Nickel Mine was initially proposed as a 15-year project, and the Joint Review Panel concluded that mining at a lower rate of production over a 40-year period might be less profitable (although still very profitable), but would allow for significantly more positive

---

<sup>3</sup> Marathon Gold, Valentine Gold Project: Amendment to the EIS, August 2021, pp.635-636

<sup>4</sup> Golder, Dam Breach Assessment and Inundation Study, Appendix C, Second Amendment to the Environmental Impact Statement, December 2021

<sup>5</sup> Marathon Gold, Updated Information for Inclusion in the DEAR, 20 May 2022

<sup>6</sup> Earthworks and MiningWatch Canada. Safety First: Guidelines for Responsible Mine Tailing Management, Second Edition. June 2022. <https://miningwatch.ca/publications/2022/5/31/updated-safety-first-peoples-tailings-standard-end-mine-waste-disasters>

<sup>7</sup> Marathon Gold, Valentine Gold Project Environmental Impact Statement, September 2020 s.2.169 (p.193)

impacts to the local and regional economy and communities, allowing for local businesses to reinvest and diversify, for workers to train up and stay on the job for longer, and even to provide a credible career path for youth.

The EIS also indicates that the alternative of in-pit disposal of all tailings, including storing the tailings from processing the Leprechaun orebody temporarily in an above grade engineered facility and then replacing them in the Leprechaun pit, would be take many years of additional work and “carry a very high cost due to the material handling costs associated with rehandling the tailings,” but it does not attempt to quantify the cost. Fuel costs are obviously variable, but a range of potential costs need to be identified to support such statements and allow them to be evaluated in the context of the broader positive and negative impacts of the project.

### ***Management of potential acid rock drainage and metal leaching (ARD-ML)***

Proposed condition 3.15 attempts to compensate for the proponent’s refusal to fully characterise the ARD-ML potential of waste rock and different grades of ore. In response to questions about the geochemical implications of changing ore cut-off grades on the properties of material treated as waste rock, the proponent states,

The basic assumption of every geochemical analysis made for a mining project is that the geochemical properties of “low grade” ore are essentially the same as the geochemical properties of “waste rock” because at any time what was once “low grade” ore could become “waste rock.” Thus, the analysis included in the baseline studies and presented in the EIS is as good an evaluation of market effects on “ore” versus “waste rock” as could reasonably be expected.<sup>8</sup>

This statement is based on the assumption that there is no geochemical difference between lower and higher grade ore, including acid-generating potential, which seems extremely unlikely in the absence of any analysis to corroborate it. In fact, the data eventually provided in the submitted ARD/ML Management Plan<sup>9</sup> supports this concern and proposes measures to be taken to manage this issue, but only in a very general way due to the low number of samples analysed.

This is a critical issue that may be difficult or impossible to address operationally. The measures described in condition 3.15 are reasonable, but in the absence of reliable baseline information and plans designed around actual ARD-ML potential, they may not be able to prevent significant long-term environmental liabilities, including the possibility of requiring monitoring and treatment in perpetuity. The proponent has deferred a number of critical details to “adaptive management” implementation, which we submit is an inappropriate use of the concept. Adaptive management should NOT mean seeing what is encountered in operations and creating management plans to adapt to those eventualities. The processes and flow chart provided by the proponent in the ARD/ML Management Plan do not identify what range of measures could be taken as part of adaptive management, only the steps involved in monitoring and responding to changing conditions. Adaptive management should mean ensuring that management plans can be adapted to accommodate new information or technologies by having plans developed for a range of contingencies, including the least probable possibilities, and ensuring that site monitoring and state-of-knowledge learning processes are in place to inform management decisions.

In summary, we find that the conclusion of “not likely to cause significant adverse environmental effects” is not justified.

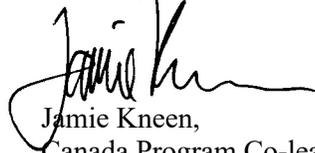
---

<sup>8</sup> Marathon Gold, Valentine Gold Project: Amendment to the Environmental Impact Statement, August 2021 p.573

<sup>9</sup> Marathon Gold, Appendix D, Second Amendment to the Environmental Impact Statement, January 2022

Thank you for the opportunity to submit our comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Jamie Kneen". The signature is fluid and cursive, with a large initial "J" and a long, sweeping underline.

Jamie Kneen,  
Canada Program Co-lead  
MiningWatch Canada