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MEMORANDUM

March 17, 2026

To: Antonia Testa
Special Project Officer
Environmental Assessment and Permissions Division

From: Etta Haley Gunsolus
Hydrologist, Priority Sector Support Unit, Technical Support Section, Northern
Region

Re: Impact Assessment Agency of Canada (IAAC) Draft Environmental Assessment
Report – Springpole Gold Project
Hydrology Review
ECHO 1-1586697745

INTRODUCTION

As requested, I have reviewed the supporting documentation submitted regarding the Impact Assessment Agency of Canada (IAAC) Draft Environmental Assessment (EA) Report for the proposed Springpole Gold Project, dated February 27, 2026, for review and comment. I have considered this document as part of my hydrologic review.

BACKGROUND AND SUMMARY OF DISCUSSION

The Springpole Gold Project, proposed by First Mining Gold Corp., is a large-scale open-pit gold and silver mine located approximately 110 km northeast of Red Lake, Ontario. The project includes an open-pit mine, on-site processing mill, co-disposal facility, water management systems, access road, transmission line, and airstrip. It is designed for approximately 10 years of operations, processing 65,000 tonnes of ore per day. The Impact Assessment Agency of Canada (IAAC) conducted the federal environmental assessment under CEAA 2012, coordinated with Ontario's parallel provincial assessment.

The following are hydrologically identified items that will be elaborated on in the "Discussion" of this memo:

1. Springpole Lake timeline;
2. Groundwater influenced drawdown modelling uncertainty;
3. Underpredicted seepage;
4. Springpole Lake hydrodynamics;
5. Operational water balance;
6. Stormwater management design criteria;
7. Effluent dispersion and assimilation;

8. Reflooded pit hydrology; and
9. Downstream effects assessment.

DISCUSSION

At an appropriate stage of project advancement, including through the development of EA conditions and any subsequent regulatory requirements, the MECP considers the following information necessary to support an informed assessment of hydrology-related environmental risk. Accordingly, the MECP recommendations are as follows:

MECP Comment #1: Springpole Lake Timeline

ECCC commented that the predicted approximate 5-year reflooding and reconnection timeline for the dewatered basin is likely not conservative enough when considering the required water-taking limits. There needs to be a full water balance analysis under multi-year variability. There should also be evidence and/or assessment that the allowable pump rates from Springpole Lake can achieve targeted volumes without interfering with lake hydraulics. This introduces hydrologic uncertainty because of the controls on the duration of the altered lake levels, flows, mixing regime, and potential habitat disruption.

MECP Comment #2: Groundwater Influenced Drawdown Modelling Uncertainty

ECCC commented that there is uncertainty in the water quantity modelling, particularly for waterbodies east of stockpiles. Generally, groundwater drawdown from pit dewatering will reduce flows to small lakes and tributaries. It appears that there is not a quantification to change in baseflow contributions to Birch Lake, Springpole Lake, and/or associated tributary systems.

MECP Comment #3: Underpredicted Seepage

ECCC stated that the proponent did not demonstrate seepage concentrations at the seepage face. The proponent predicted 10% of seepage bypasses the collection ditching and flows to Birch Lake and Springpole Lake but empirical justification is lacking. MECP is concerned about the long term, uncontrolled groundwater-surface water interactions.

MECP Comment #4: Springpole Lake Hydrodynamics

Dewatering removes a deep basin, altering lake hydrodynamics. The EA acknowledges changes, but hydrodynamic modelling should be conducted, with under-ice hydrology considered. This would aim to predict downstream hydrologic consequences.

MECP Comment #5: Operational Water Balance

The EA does not present a complete, long-term, quantified water balance and therefore the sustainability of the lake withdrawals remain uncertain.

MECP Comment #6: Stormwater Management Design Criteria

ECCC and MECP have highlighted the importance of extreme precipitation events. Project water management structures should be designed for a 1:100-year storm event. The proponent should consider modern Northern Ontario IDF curves that demonstrate intensification beyond historical

1:100year parameters and modelling of rain-on-snow (drivers of extreme runoff). Designs for the multi-decade project under climate uncertainty should be demonstrated.

MECP Comment #7: Effluent Dispersion and Assimilation

No hydrodynamic dispersion modelling is shown. The proponent simply assumes that the southeast arm of Springpole lake has sufficient mixing and assimilative capacity. If relocated to Birch Lake, hydrologic impacts have not been assessed.

MECP Comment #8: Reflooded Pit Hydrology

At closure, the open pit becomes a pit lake, but the EA does not analyze the pit-lake hydrology. Pit lakes often have long-term hydrologic issues (stratification, equilibrium, seepage exchange) that have not been evaluated.

MECP Comment #9: Downstream Effects Assessment

Hydrologic effects downstream of Springpole and Birch Lake are not quantitatively evaluated. There is a gap in cumulative hydraulic effects. Further, analysis of peak flow timing, water level variability, etc., are recommended.

CLOSURE

If you have any questions regarding the above comments, do not hesitate to contact me. The purpose of the preceding review is to provide advice to the Ministry of the Environment, Conservation and Parks regarding the IAAC Draft EA for the Springpole Gold Project. The conclusions, opinions and recommendations of the reviewer are based on information provided by others, except where otherwise specifically noted. The ministry cannot guarantee that the information that has been provided by others is accurate or complete. A lack of specific comment by the reviewer is not to be construed as endorsing the content or views expressed in the reviewed material.

<Original signed by>

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