

March 31, 2022

Attention: Ms. Debra Sikora
Review Panel Chair
Marathon Palladium Project
Impact Assessment Agency of Canada
marathonminereview-examenminemarathon@iaac-aeic.gc.ca

Dear Ms. Sikora,

Reference: Marathon Palladium Project (Ref. Number 54755) – Undertakings #18, 19, 20, and 21 – Effects on Caribou

I am writing in response to Undertakings #18, #19, #20, and #21 as outlined in the letter from the Panel dated March 24, 2022, received following the topic-specific sessions on caribou held on March 23, 2022.

With respect to Undertaking #18, we enclose information to clarify the methods and conclusions in our caribou connectivity analysis.

With respect to Undertaking #19, we enclose information on the onsite rehabilitation and post-closure landscape as it relates to mitigating potential effects and providing benefits to Caribou in the Lake Superior Coastal Range.

With respect to Undertaking #20, we enclose information to identify the potential offset measures currently being considered based on GenPGM's discussions with Indigenous communities, government agencies, and other stakeholders.

With respect to Undertaking #21, we enclose information to clarify and summarize our position with respect to ECCC's recommendation for an updated connectivity analysis, on-site rehabilitation and post-closure restoration plan, and offset plan as part of these proceedings.

Thank you for your consideration of these additional technical filings.

Regards,

Generation PGM

<Original signed by>

Drew Anwyll, P. Eng
Chief Operating Officer
Generation PGM Inc.

<contact information
removed>

Cc. Laurie Bruce, Joint Review Panel Member (by email)
Gay Drescher, Joint Review Panel Member (by email)
Jason Patchell, Panel Manager (by email)

Undertaking #21

Response to ECCC Recommendation

Undertaking 21: Response to ECCC Recommendation

Panel Information Session: March 23, 2022

Undertaking Request # 21

To the extent not covered in its responses to Undertakings 18 to 20, GenPGM will provide the Panel with a written response to the ECCC recommendation that it submit an updated connectivity analysis, on-site rehabilitation and post-closure restoration plan, and offset plan prior to the conclusion of the environmental assessment process.

GenPGM Response

In regard to Caribou, in their submission to the Joint Review Panel (Panel) on February 25, 2022 (CIAR #1086) and presentation on March 22, 2022, ECCC recommended that should the Project be approved, the Panel request GenPGM to:

- 1. Update the connectivity analysis, on-site rehabilitation and post-closure restoration plan and the offset plan before concluding the assessment process to support decision making and including requirements.*

Following the questions and responses of various parties during the topic-specific session on March 23, 2022, and in recognition of the additional information submitted by GenPGM as Undertakings 18 to 20, it is GenPGM's position that sufficient information is available to the Panel to demonstrate that there will be no significant adverse effects of the Project on Caribou, consistent with our conclusion of the EIS Addendum, Section 6.2.8 (CIAR #727), and that appropriate mechanisms exist beyond the current environmental assessment process to confirm further details, ensure compliance, and confirm effects predictions for this species.

Rationale for this position is as follows:

- GenPGM has documented existing conditions within the SSA, LSA, and RSA in regard to boreal caribou and their habitat based on background information, site specific studies, and information received from the MNDMNR, MECP and ECCC regarding the state of the population, habitat, and connectivity in the Lake Superior Coastal Range and adjacent Discontinuous Distribution.
- The assessment of potential effects documented in the Woodland Caribou Impact Assessment (SID #26) (CIAR #234) and EIS Addendum (Section 6.2.8, CIAR #727), which was supplemented through responses to IRs 6.21 to 6-25 (CIAR #950) and supplemental analysis on the connectivity of caribou habitat and potential noise effects (CIAR #976), has now also been supplemented with further analysis and description of connectivity effects in Undertaking #18.
- GenPGM supports the intent and recovery actions identified in both the federal Recovery Strategy and the provincial Caribou Conservation Plan, and will work within its power in a collaborative fashion with agencies, Indigenous communities, forest managers and other stakeholders to this end.
- GenPGM recognizes that although there is no evidence of current or past use of the Project site by caribou, the Project site could potentially function as critical habitat in the future and caribou could potentially pass through the site while moving within or between ranges.
- To mitigate potential loss of caribou habitat, GenPGM plans to rehabilitate at least 40% of the 1,100-ha Project site to even-aged conifer forest, and is seeking opportunities to restore habitat and connectivity elsewhere in the LSCR or adjacent Discontinuous Distribution through off-site mitigation as a component of an Overall Benefit (OB) Plan.

Undertaking 21: Response to ECCC Recommendation

- Caribou will likely not be able to pass through the 6-km wide Project site during 2-year construction and planned 13-year operations phase; however, no significant impacts on connectivity within the Coastal Range or with ranges to the north are anticipated because:
 - There are few if any caribou remaining in the mainland coastal range that could conceivably interact with the Project during the construction and operation phases.
 - Caribou moving within the Coastal Range can easily divert around the Project site to the north during all mine phases, and may do so currently due to predators associated with the Marathon municipal landfill.
 - Given the broad east-west extent of the Nipigon and Pagwachuan ranges, as well as the Coastal Range, there is a low probability of a dispersing caribou arriving at the Project and it can easily divert around it should that unlikely event occur.
 - Connectivity will be restored post-closure by the eventual re-establishment of a 1-km wide conifer-dominated corridor between the reclaimed PSMF and managed rock stockpile.
 - The residual effects of the Project arise from the loss of potential caribou habitat in the SSA and the potential effect that the Project may have during construction and operation on connectivity. With remediation at closure, at least some of this loss may be mitigated in the long-term. Even with partial rehabilitation including the removal of the access road and transmission line, the 4-6 km wide SSA could potentially impair movement of caribou, although they are highly mobile. However, these effects are expected to be minor, and more than compensated for by the proposed off-site mitigation measures targeting rehabilitation, reducing predation risk, and improving connectivity for the remaining caribou in the LSCR.
- GenPGM is committed to wildlife monitoring and, if a caribou does arrive on site during construction or operations, mitigation plans will be in place to temporarily suspend activities to allow the caribou to safely pass through the site undisturbed.
- Additional details regarding the on-site rehabilitation and post-closure restoration plan have been provided in Undertaking #19, which includes an approximately 1 km wide even-aged, treed conifer corridor across the site between the reclaimed PSMF and open pits to improve potential connectivity in the post-closure landscape.
- GenPGM recognizes that there is agency concern and uncertainty regarding potential sensory impacts on caribou from the Project during operations, particularly with respect to MECP-delineated Category 1 habitat to the southwest of the Project. GenPGM does not anticipate any significant sensory effects in that habitat south of Highway 17 since it is beyond the federal 45 dBA noise threshold for sensitive wildlife and there are few if any caribou in the mainland range that could be potentially affected and no evidence of sensitive nursery or regular winter use in the identified habitat. Nonetheless, should the Project be approved, GenPGM is committed to monitoring caribou in this area as well as adjacent known critical habitat on the Coldwell Peninsula and Pic Island.
- In addition to the actions described above, GenPGM is committed to implementing additional measures consistent with the federal recovery strategy and the provincial Caribou Conservation Plan in order to achieve a net benefit for caribou populations and their habitat. A conceptual list of these measures is provided in Undertaking #20, which was presented to federal and provincial regulators as well as Indigenous communities between December 2021 and February 2022. There are plans for on-going consultation to further refine and update the proposed plan.

Undertaking 21: Response to ECCC Recommendation

- Confirmation of specific on-site and off-site measures to achieve a net benefit to the species within the LSCR will occur through the MECP permitting process under the Ontario Endangered Species Act.
- It is anticipated, and GenPGM has proposed, to implement a caribou monitoring as part of the Wildlife Follow-up and Monitoring Program to be developed in consultation with federal and provincial agencies and Indigenous communities.

While the ECCC has suggested that additional information be provided as part of the environmental assessment process, it is GenPGM's position that sufficient information is available to the Panel through information on the record to demonstrate that there will be no significant adverse effects of the Project on Caribou. GenPGM believes that appropriate mechanisms exist to confirm the details of proposed mitigation / offsetting measures.

There is a need to consult with Indigenous communities on the post-closure landscape, including reclamation opportunities, end land use plans, and post-closure site conditions. The information provided in the Undertakings #19 and #20 will be vetted with interested communities, including Biigtigong Nishnaabeg, Pays Plat First Nation, Michipicoten First Nation, and others. Each community may have diverse views on the appropriateness of various options that must be explored and considered prior to finalizing any planned actions, which requires time not available through this process. Similarly, on-going consultation with the federal and provincial agencies, including MECP and ECCC, is warranted and considered beneficial to the identification of opportunities and targets to achieve a net benefit to the species consistent with the Ontario Woodland Caribou Conservation Plan (2009), Amended Recovery Strategy for the Woodland Caribou (2020), and the Action Plan for the Woodland Caribou (2018).

Therefore, it is GenPGM's conclusion that with mitigation, including on-site and off-site measures, the residual environmental effect on caribou is predicted to be not significant.