

MARATHON PALLADIUM – COPPER PROJECT COMPLIANCE MONITORING PROGRAM

Environmental Assessment Act Approval

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Date	Revision	Description
December 29, 2023	0	Initial document submission to MECP.
August 21, 2025	1	Compliance monitoring program revised to incorporate comments received from MECP.

Marathon Copper-Palladium Project – Compliance Monitoring Program

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Marathon Copper-Palladium Project – Compliance Monitoring Program

1.0 INTRODUCTION

Generation PGM Inc. (GenPGM), a subsidiary of Generation Mining Limited, is planning to construct, operate and decommission the Marathon Palladium-Copper Project (the Project) which is located approximately 10 km from Marathon, Ontario. Figure 1-1 shows the location and general layout of the Project.

The site is accessed via the Camp 19 Road which connects to Highway 17 near Marathon, Ontario. The Project includes three open pits, an ore processing plant, tailings and mine rock storage facilities, site access roads, a transmission line, explosives factory and magazines, water management facilities, ancillary mine infrastructure and associated activities. The rate of production is planned to be approximately 25,200 tonnes of ore per day with a proposed operating mine life of approximately 13 years.

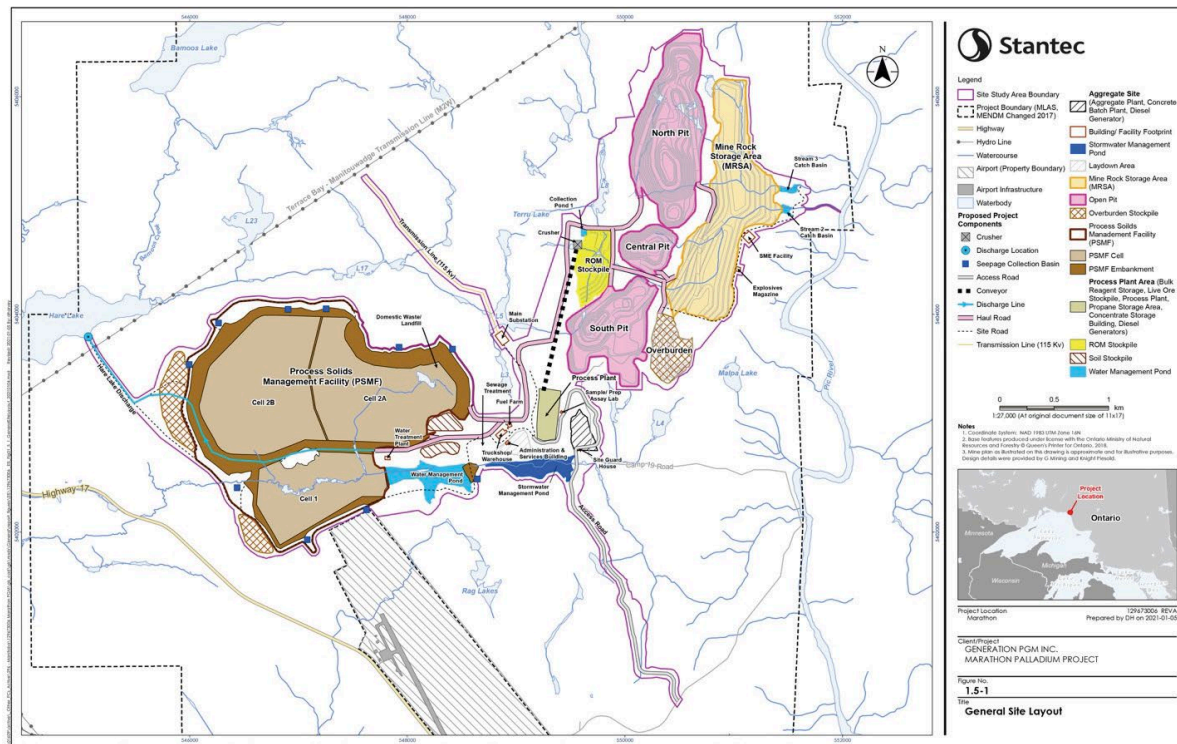
The Environmental Assessment for the Project was approved in November 2022 in accordance with the Canadian Environmental Assessment Act (CEAA, 2012) and Ontario's Environmental Assessment Act through a Joint Review Panel appointed pursuant to the Canada-Ontario Agreement on Environmental Assessment Cooperation (2004) and the Amended and Restated Agreement to Reestablish a Joint Review Panel (2021).

As of August 2025, GenPGM has not announced a formal decision to proceed with the Project, however this is anticipated to occur in 2026 following the finalization of Project financing. As such, the Project is currently in the Pre-Construction phase and no construction activities have been undertaken for the Project.

This revised compliance monitoring program is submitted to address Condition 4.1 of the provincial environmental assessment Notice of Approval to Proceed with the Undertaking of the Project issued by the Provincial Minister of Environment on November 30, 2022, where it states;

The Proponent shall prepare and submit to the Director for approval and for the public record an environmental assessment compliance monitoring program.

Figure 1-1 – General Layout



2.0 PURPOSE AND SCOPE

The purpose of the compliance monitoring program is to verify the predications made in the environmental assessment and the expected effects of the Project and to determine if adjustments or additional mitigation measures are required. As required by Condition 4.3 the compliance monitoring program includes a description of how GenPGM will:

- monitor implementation of the Project in accordance with the environmental assessment with respect to mitigation measures, public consultation, and additional studies and work to be carried out;
- monitor compliance with the conditions of the Notice of Approval; and
- monitor compliance with all commitments with respect to mitigation measures, consultation with Indigenous Groups and the public, and additional studies and work to be carried out.

The compliance monitoring program includes an implementation schedule for monitoring activities to be completed as discussed in Section 4.

It is understood that amendments to the compliance monitoring program may be required by the Director of the Environmental Assessment Branch. Should a revision(s) be required, a copy of the updated compliance monitoring program will be submitted to the Director within the prescribed timeline. GenPGM will implement the compliance monitoring program, including any amendments to it, as required.

2.1 Approvals and Permits

Federal and provincial approvals and permits applicable to the Project are summarized in Table 2.1.

Table 2.1 Federal and Provincial Approvals and Permits

Approval / Permit	Responsible Agency	Current Version Issued
Navigation Protection Program Approval	Transport Canada	March 1, 2023
Metal and Diamond Mining Effluent Regulations (Schedule 2 Authorization)	Environment Canada and Climate Change	July 31, 2024
Fisheries Act, Paragraph 35(2)(b) Authorization	Fisheries and Oceans Canada	August 2, 2024
Endangered Species Act Permit	Ontario Ministry of Environment, Conservation and Parks	August 29, 2023
Environmental Compliance Approval (Air)	Ontario Ministry of Environment, Conservation and Parks	September 22, 2023
Closure Plan Approval (In Accordance With Schedule 2 of O. Reg. 240/00)	Ontario Ministry of Mines	November 6, 2023
Permit to Remove Forest Resources	Ontario Ministry of Natural Resources	November 17, 2023
Permit to Take Water	Ontario Ministry of Environment, Conservation and Parks	February 28, 2025
Lakes and Rivers Improvement Act Permits	Ontario Ministry of Natural Resources	March 10, 2025
Environmental Compliance Approval (ISW)	Ontario Ministry of Environment, Conservation and Parks	May 21, 2025

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The list presented in Table 2.1 have separate monitoring and reporting requirements which are not included in the environmental assessment compliance monitoring program. GenPGM and / or the regulatory agency responsible for the approval / permit should be contacted for further information as required.

3.0 COMPLIANCE MONITORING

As required by Condition 4, the compliance monitoring program considers the requirements for both the environmental assessment commitments and the conditions of the provincial Notice of Approval. Undertaking 31 submitted to the Joint Review Panel (CIAR # 1266) provided a consolidated list of project commitments, including mitigation and follow-up monitoring programs, that were developed through the environmental assessment process for the Project. The environmental assessment commitments as well as the conditions of the provincial Notice of Approval will be included in the compliance monitoring program as provided in Appendices A and B, respectively.

GenPGM intends to monitor compliance with the environmental assessment commitments and the conditions of the provincial Notice of Approval using the following compliance monitoring tools.

3.1 Compliance Database

GenPGM utilizes a specialized compliance database to monitor compliance with the commitments and conditions included in the compliance monitoring program.

The GenPGM Sustainability Department is led by the Sustainability Manager who is supported by various coordinators, technicians, and specialists. Management of each individual commitment has been assigned to a specific member of the Sustainability Department. These members are responsible for single, recurring and perpetual commitments, and engage additional support as necessary to ensure compliance.

As required, GenPGM maintains an electronic back-up of the contents of the compliance database, including all mitigation and monitoring commitments, conditions of approval, as well as relevant supporting documentation as required.

3.2 Follow-up Monitoring Programs and Management Plans

GenPGM, supported by various third-party consultants as required, is in the process of developing follow-up monitoring programs and management plans. The programs and plans will ensure that the requirements of the compliance monitoring program are met. The programs and plans will be implemented when the Project reaches the Construction phase.

3.3 Updates to Compliance Database, Programs and Plans

Additional Project commitments, including permit conditions, will be incorporated into the compliance database and will result in the review and update of follow-up monitoring programs and management plans as appropriate. The compliance database, programs and plans, will be updated on an ongoing and as-needed basis, not less than annually during the Construction, Operations and Active Closure phases of the Project.

4.0 IMPLEMENTATION SCHEDULE

The implementation schedule for the compliance monitoring program is based on the Project schedule shown in Table 4.1. The compliance monitoring program will occur throughout all phases of the Project including Pre-Construction, Construction, Operations, and Closure (i.e. decommissioning, active, and passive).

Table 4.1 Project Schedule

Project Phase	Expected Start Date	Expected Completion Date	Expected Duration
Pre-Construction	Dec 2022 ¹	Dec 2025	3 years
Construction	2026	2027	2 years
Operations	2028	2040	13 years
Closure	2041	-	-
Active Closure ²	2041	2045	5 years
Passive Closure ³	2046	2053	8 years
Post-Closure ⁴	2054	2090	37 years
Notes: ¹ The Pre-Construction Phase started in December 2022 following the approval of the environmental assessment for the Project. ² Active Closure: decommissioning, demolition, and site reclamation activities. Site water management and filling of open pits. Site management and monitoring. ³ Passive Closure: Site water management and filling of the open pits. Passive discharge of runoff from the TSF to Stream 6 (Angler Creek). Site management and monitoring. ⁴ Post-Closure: Site water management and discharge of excess water from open pits to Hare Lake. Site management and monitoring.			

5.0 COMPLIANCE MONITORING REPORT

An annual compliance monitoring report is required as per Condition 5 of the Notice of Approval as follows:

- 5.1. *The Proponent shall prepare an annual compliance report describing the results of the compliance monitoring program required by Condition 4 and shall submit each report to the Director for review and the public record, in accordance with the requirements of this Condition 5.*
- 5.2. *The first annual compliance report shall describe the results of the compliance monitoring program for the period of one year from the Date of Approval and each subsequent report shall describe the results of the compliance monitoring program for each subsequent one-year period.*
- 5.3. *The Proponent shall submit each annual compliance report to the Director by no later than 30 Days following each anniversary of the Date of Approval, unless otherwise specified in writing by the Director.*
- 5.4. *The Proponent shall submit annual compliance reports until all conditions in this Notice of Approval are satisfied or the Proponent is instructed otherwise in writing by the Director.*
- 5.5. *The Proponent shall notify the Director in writing when the final annual compliance report is being submitted. The MECP will confirm whether or not the annual compliance reporting requirements in Conditions 5.1 to 5.4 have been fulfilled and the Director will confirm this in writing to the Proponent.*

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- 5.6. *The Proponent shall retain, either on the Site or in another location approved by the Director, a copy of each annual compliance report that has been submitted to the Director until such time as the Director determines that the Proponent is no longer required to do so. The Director will notify the Proponent in writing should the Director make such a determination.*
- 5.7. *Within 30 Days of submitting each annual compliance report to the Director, the Proponent shall post the annual compliance report on its website.*
- 5.8. *The Proponent shall make each annual compliance report that has been submitted to the Director, and any associated documentation, available to any MECP designate in a timely manner when requested to do so.*

The first annual compliance monitoring report was due November 30, 2023, with annual reports due to later than December 30 each year unless otherwise specified by the Director of the Environmental Assessment Branch (Director). The compliance monitoring report is submitted to the Director for review and for the public record.

The compliance monitoring report will contain the following sections at a minimum and GenPGM may include others as appropriate during the report preparation:

- Introduction
- Project Status
- Compliance Monitoring Results

The compliance monitoring program considers the requirements for both the environmental assessment commitments and the conditions of the provincial approval, as provided in Appendix A and B, respectively.

A copy of the annual compliance monitoring program report will be posted on the GenPGM website within 30 days of submission of the report to the Director.

APPENDIX A - Undertaking 31

Commitment List and Information		
Tracking No.	Category	Commitment
EA-MT1	Environmental and Social Management System (ESMS)	<p>The ESMS is intended and will be designed to:</p> <ul style="list-style-type: none"> • Maintain compliance with applicable performance standards (e.g., limits and requirements imposed or a result of approval of the environmental assessment and subsequent federal and provincial permits and approvals) • Verify the predicted effects and effectiveness of mitigation measures • Reduce risk of potential accidents and malfunctions • Provide a structure for the implementation of an adaptive management strategy • Streamline program and subsequent plans to meet applicable Federal and Provincial regulatory requirements and informed by agreements and through consultation with Indigenous communities and the Town of Marathon • Manage various activities of the Project through the development and implementation of the following management plans. <ul style="list-style-type: none"> ○ Waste and recycling material management – details the segregation, storage and disposal of materials to be in compliance with Regulation 347 under the Environmental Protection Act. ○ Access management – details access protocols for non-employees to travel from the Gate House to the north of the SSA. ○ Concentrate transfer station (rail load-out facility) management – details operational procedures and mitigations to reduce noise and dust generation under an Environmental Compliance Approval (ECA) or Environmental Activity and Sector Registry (EASR) in accordance with the Environmental Protection Act, Ontario Regulation 419/05 and Guideline A-7. ○ Tailings (process solids) impoundment operations – details operational procedures and mitigations to be employed for the safe storage of Type 2 material under an ECA or EASR in accordance with the Environmental Protection Act and the Ontario Water Resources Act. The construction of the TSF Dam will also need to be in accordance with Ontario Regulation 454/96 of the Lakes and Rivers Improvement Act. ○ Materials handling (non-mined materials) – details operational procedures and mitigations for the proper storage of explosives, fuels and other hazardous substances. A Licence for a Factory and Magazine for Explosives will be required in accordance with the Explosives Act. A Licence to Operate a Bulk Storage Plant will be required for the storage of fuels in accordance with the Technical Standards and Safety Act. ○ Emergency preparedness and response – details operational procedures and mitigations to be enacted in the event of an emergency. ○ Erosion prevention and sediment control – details the mitigation measures to be implemented to prevent erosion of disturbed soils and to prevent sediment transport from the site. This plan will be prepared taking guidance from the Ontario Provincial Standard Specifications for Temporary Erosion and Sediment Control Measures (OPSS 805) and guidance from the Environmental Protection Act and Ontario Water Resources Act - details the operations practices and mitigations to be employed to manage and to prevent the release of sediment. ○ Fish Habitat Offsetting Strategy and Compensation Plan – details the measures to be employed to provide an offset for the permanent alteration and loss of fish habitat in accordance with the

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		<p>Fisheries Act subsection 35(2) and Section 27.1 of the Metal Mining Effluent Regulations.</p> <ul style="list-style-type: none"> ○ Atmospheric quality management – details the mitigation measures to be implemented to reduce Project-related effects to air quality and noise. An Environmental Compliance Approval (ECA) or Environmental Activity and Sector Registry (EASR) will be obtained in accordance with the Environmental Protection Act, Ontario Regulation 419/05 and Guideline A-7, including air quality management and noise management (including noise and vibration). ○ Water Management – details the mitigation measures to be implemented to reduce Project related effects to surface and groundwater. An Environmental Compliance Approvals (ECA) or Environmental Activity and Sector Registry (EASR) for industrial sewage will be obtained in accordance with the Ontario Water Resource Act: ○ Acid Rock Drainage / Metal Leaching (ARD/ML) management – details the management and mitigation measures for Type 2 materials. An Environmental Compliance Approval (ECA) or Environmental Activity and Sector Registry (EASR) for industrial sewage will be obtained in accordance with the Ontario Water Resources Act. ○ Vegetation management (including invasive species) – details the mitigation and approach to removing and managing vegetation. A Permit to Remove Forest Resources will be required for removal of trees on Crown land. ○ Wildlife and Species at Risk management - details the management strategies and mitigations to manage wildlife and species at risk. Vegetation removals will be conducted in accordance with the Migratory Bird Convention Act and the Habitat Management Guidelines for Bats of Ontario (MNR). Bat boxes will be installed in accordance with the Best Management Practices for Bats in British Columbia. A Scientific Collection Permit For Initial Wildlife relocation will be required in accordance with the Fish and Wildlife Conservation Act. An Overall Benefit Permit as per Section 17(2)C of the Endangered Species Act may be required. ○ Reclamation and closure - details regarding the mine closure plan will be required in accordance with Ontario Regulation 240/00 of the Mining Act. ○ Soil salvage and storage – details the storage and management strategies for overburden and soil within the mine site. This plan will need to comply with Ontario Regulation 406/19, On-Site and Excess Soil Management. ○ Spills Prevention and Response Plan - details mitigation measures and response procedures in the event of a spill. This plan should consider Ontario Regulation 675/98.
EA-MT2	Health and Safety Management System (HSMS)	The HSMS will be developed in accordance with the Occupational Health and Safety Act and will be implemented and followed in accordance with all applicable legislation and regulations.

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EA-MT3	Indigenous Groups	<p>All commitments made for the Project are proposed to reduce potential adverse environmental and social effects of the Project that could adversely affect Indigenous communities and people. With regard to Indigenous communities potentially affected by the Project, GenPGM will:</p> <ul style="list-style-type: none"> • Inform the design through consultation with communities, consideration of traditional knowledge/TLRU reports provided by communities and reduced the mine's physical footprint • Inform the design through Biigtigong Nishnaabeg Travel Route Mapping Survey, if available, to reduce conflict between mine design and existing travel routes • Offer education and training programs, as well as apprenticeships, to build capacity and increase employability and job ready skills to support Indigenous workers and females and offer employment opportunities to Indigenous workers and females, throughout the life of the Project • Work with economic development groups of Indigenous communities to increase contracting opportunities for qualified and cost-competitive bids, throughout the life of the Project • Establish environmental committees with representation from identified Indigenous communities, the Town of Marathon, and other relevant stakeholders. These committees will be used for engagement through the permitting process and throughout the life of the Project. These committees have been established and will continue to operate throughout the life of the Project • Offer training, participation, development, and implementation of environmental monitoring programs for the duration of monitoring activities • Ongoing Indigenous consultation on the results of the mine environmental effects monitoring (EEM) program through the various Environmental Committees, throughout the life of the Project • Engage with Biigtigong Nishnaabeg to support the following proposed Crown accommodation measure "Support and funding of a social service plan and targeted health services plan" (CIAR# 1083, PDF 80) for Biigtigong Nishnaabeg members who are employed through the Project • Engage with Biigtigong Nishnaabeg to identify solutions to the impacts of the Project on community infrastructure and social services to help minimize negative impacts. • Implement a Harvester Training Fund to support annual harvests and trapline training programs, • Develop, in collaboration with Biigtigong Nishnaabeg, a socio-economic management and monitoring plan (SEMMP) to measure and mitigate the socio-economic impacts of the Project on Biigtigong Nishnaabeg • Engage with Biigtigong Nishnaabeg to support the proposed Crown accommodation measure and Crown funding to "Create a bypass road (Gaffhook Lake Access), with access controlled by Biigtigong" (CIAR# 1083, PDF 57) • Engage with Biigtigong Nishnaabeg to determine and implement monitoring and mitigation effects for potential effects to species of high importance to Biigtigong Nishnaabeg

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EA-MT4	Indigenous Considerations	<p>All commitments made for the Project are proposed to reduce potential adverse environmental and social effects of the Project that could adversely affect Indigenous communities and people. With regard to Indigenous communities potentially affected by the Project, GenPGM will:</p> <ul style="list-style-type: none"> • Provide appropriate accommodation for impacts to traditional land and resource use, prior to restricting access to the SSA • Provide reasonable support to Biigtigong Nishnaabeg to secure a replacement for the community Trapline TR-022 • Continue and progress discussions relating to community arrangements and benefit agreements with Biigtigong Nishnaabeg and other identified Indigenous communities
EA-MT5	Indigenous Considerations	<p>All commitments made for the Project are proposed to reduce potential adverse environmental and social effects of the Project that could adversely affect Indigenous communities and people. With regard to Indigenous communities potentially affected by the Project, GenPGM will:</p> <ul style="list-style-type: none"> • Maintain access to the Pic River via Camp 19 Road and to Bamooos Lake via the existing trail through Hare Lake for the duration of the Project • Develop a protocol prior to construction for use of the initial portion of the Camp 19 Road from which there is access to the Pic River and other travel corridors used to access areas for traditional wildlife, fish and plant harvesting • Provide escorted access through the SSA during construction and operations when safety permits, to the extent possible
EA-MT6	Indigenous Considerations	<p>All commitments made for the Project are proposed to reduce potential adverse environmental and social effects of the Project that could adversely affect Indigenous communities and people. With regard to Indigenous communities potentially affected by the Project, GenPGM will:</p> <ul style="list-style-type: none"> • Develop a communications protocol prior to the construction with Biigtigong Nishnaabeg for reporting of any road mortality of large mammals along the access road
EA-MT7	Indigenous Considerations	<p>All commitments made for the Project are proposed to reduce potential adverse environmental and social effects of the Project that could adversely affect Indigenous communities and people. With regard to Indigenous communities potentially affected by the Project, GenPGM will:</p> <ul style="list-style-type: none"> • Design and operate the mine and associated infrastructure to reduce environmental effects with a focus on water and waterbodies identified by Indigenous communities as VECs, fisheries, and air quality

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EA-MT8	Indigenous Considerations	<p>All commitments made for the Project are proposed to reduce potential adverse environmental and social effects of the Project that could adversely affect Indigenous communities and people. With regard to Indigenous communities potentially affected by the Project, GenPGM will:</p> <ul style="list-style-type: none"> • Include the soils and terrain, vegetation, wildlife and fish, and fish habitat monitoring programs to monitor the potential impacts of the Project on human health and establish rigorous baselines for metal concentrations in foods and medicines of importance to Biigtigong Nishnaabeg • Develop, in consultation with Biigtigong Nishnaabeg, and other relevant authorities as may be determined by GenPGM and Biigtigong Nishnaabeg from time to time, a follow-up program to verify the accuracy of the effects assessments predictions as they pertain to adverse environmental effects on human health caused by changes in concentrations of contaminants of potential concern in country foods, based on completed baseline testing and additional monitoring • Develop, in consultation with Biigtigong Nishnaabeg, and other relevant authorities as may be determined by GenPGM and Biigtigong Nishnaabeg, a sampling program to assess concentrations of contaminants of potential concern in country foods to monitor for future human health assessments. • Develop and implement, in collaboration with Biigtigong Nishnaabeg, a country foods monitoring program
EA-MT9	Waste and Recycling Management Program	<p>GenPGM will develop and implement a management plan that will describe the Project's waste storage and disposal infrastructure, which includes the following components:</p> <ul style="list-style-type: none"> • Solid non-hazardous waste disposal will be directed to the Town of Marathon Landfill • A material storage area, which allows storage of all recyclable and potentially re-usable items that will ultimately be shipped off site • A special waste storage area to handle certain wastes; for example, waste oil, oil filters, diesel fuel, anti-freeze, solvents, and lubricants (and containers in which they are contained), aerosol containers, hydraulic hoses and batteries prior to shipment off site • Proper on-site management and off-site disposal of food refuse, lubricants, and other waste that may be attractive to wildlife. • A hazardous waste area, which allows for temporary storage of all hazardous waste materials that will ultimately be shipped off site • A sewage system to manage sewage on site <p>This plan will be prepared in accordance with Regulation 347 under the Environmental Protection Act.</p> <p>On-site waste facilities will follow standard environmental protection measures; hazardous wastes will be stored in secondary containment, will be constructed to reduce footprint, and drainage will be managed within the Project site.</p> <p>Procedures and policies for the storage, transport and disposal of waste and recycling materials will be developed as part of the management plan. Waste management policies will be developed to meet current waste management legislation.</p>

Commitment List and Information		
Tracking No.	Category	Commitment
EA-MT10	Material Handling (Non-Mined Material)	<p>To mitigate the potential for an incident involving hauling concentrate, GenPGM will:</p> <ul style="list-style-type: none"> • Retain appropriately licensed or trained operators both for long distance transport of concentrate and for on-site haul trucks • Post and monitor speed limits along the site access road and roads within the site • Follow up with contractors/employees on reports of haul trucks travelling at excessive speeds • Equip trucks with soft covers to prevent dusting during transport • Require all trucks to have a means of communicating with the Project site or their dispatch
EA-MT11	Material Handling (Non-Mined Material)	<p>To mitigate the potential of a chemical release during transport, GenPGM will:</p> <ul style="list-style-type: none"> • Only allow licensed companies to deliver to site • Require third-party contractors to have active service agreements with licensed release response contractors • Require all drivers to have appropriate training, including release response training • Require all trucks to have appropriate communication capabilities • Maintain vehicles and equipment operated by GenPGM that are used to transport chemicals • Post and monitor speed limits on the site access road and on-site roads
EA-MT12	Material Handling (Non-Mined Material)	<p>To mitigate the potential of a fuel release during transport, GenPGM will:</p> <ul style="list-style-type: none"> • Only contract appropriately licensed companies and drivers to deliver to site • Require third-party contractors to have active service agreements with licensed release response contractors • Require all on-site drivers to be appropriately trained, including release response training • Require all trucks to have appropriate communication capabilities • Maintain vehicles operated by GenPGM • Post and monitor speed limits on the site access road and roads within the site and will follow-up with any reports of excess speed
EA-MT13	Material Handling (Non-Mined Material)	<p>To mitigate the potential of a fuel release from on-site storage, the facilities will contain the following design features:</p> <ul style="list-style-type: none"> • Fuel storage areas (excluding small containers moveable by hand) will be isolated from watercourses, waterbodies and other sensitive environments by a minimum of 100 m • Areas used for day tanks will have been previously cleared to facilitate site development and will be isolated from sensitive features • Fuel storage equipment will comply with applicable legislative requirements • Tanks will have secondary containment and/or will be double-walled with collision protection • The main fuel farm will have lined aprons and collection catchments • Release response equipment will be maintained on site • Operational procedures will be posted at all storage facilities • A high-level alarm will be placed on Project storage tanks (or an equivalent approach will be provided), so that the operators are made aware of the fill level during filling operations • Automatic shut-off valves and other such equipment will be installed to further reduce the risk of spills during fuel transfer operations <p>Fuel storage will be licensed as a Bulk Storage Plant in accordance with the Technical Standards and Safety Act. Details regarding the safe handling and</p>

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		storage of fuels on site, and the measures to be followed in the event of an accidental spill, will be defined in an Emergency Preparedness and Response Plan and Spill Prevention and Contingency Plan.
EA-MT14	Material Handling (Non-Mined Material)	<p>To mitigate the potential of a fuel release during on-site dispensing, GenPGM will:</p> <ul style="list-style-type: none"> • Provide fuel dispensing equipment that complies with applicable legislative requirements • Require that mobile refueling vehicles are properly maintained and inspected regularly for leaks • Maintain suitable setbacks and appropriate containment between portable dispensing equipment and sensitive environmental features • Design the main fuel dispensing location with compacted gravel or concrete containment pads with drive-on facilities capable of capturing minor releases • Maintain release response equipment on site • Develop operational procedures and training materials • Install automatic shut-off valves to further reduce the risk of spills during fuel transfer operations <p>Details regarding the safe handling and storage of fuels on-site, and the measures to be followed in the event of an accidental spill, will be defined in an Emergency Preparedness and Response Plan and Spill Prevention and Contingency Plan.</p>
EA-MT15	Material Handling (Non-Mined Material)	<p>To mitigate the potential of an explosives incident, GenPGM will:</p> <ul style="list-style-type: none"> • Follow appropriate regulatory requirements, including the installation of chain-link fencing surrounding the explosives facility • If a third-party contractor is employed, they would be licensed to operate the storage facility and/or manufacturing plant, as well as using specifically designed secure storage magazines for blasting accessories • Follow good housekeeping practices • Develop explosives storage, handling, and blasting procedures and train personnel appropriately • Provide suitable protection for above ground fuel tanks used in the explosives manufacturing process in accordance with Subsection 4.3.7 of the National Fire Code of Canada (2015) <p>Explosives handling will be in accordance with the Explosives Act and a Licence for a Factory and Magazine for Explosive will be obtained. Details regarding the safe handling and storage of explosives will be defined in procedures.</p>
EA-MT16	Material Handling (Non-Mined Material)	<p>To mitigate the potential of a chemical release within the mine site, GenPGM will:</p> <ul style="list-style-type: none"> • Construct buildings or structures for chemical storage that include sealed floors and sumps or drains and collection tanks to contain material released to ground • Establish on-site transport routes with consideration of appropriate setbacks from environmentally sensitive features • Store and handle all chemicals as appropriate according to material safety data (MSD) sheet information • Appropriately train (e.g., WHMIS) all personnel handling chemicals

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Tracking No.	Category	Commitment
		Details regarding the safe handling and storage of chemicals on site and the measures to be followed in the event of an accidental spill will be defined in a management plan, an Emergency Preparedness and Response Plan and Spill Prevention and Contingency Plan.
EA-MT17	Emergency Preparedness and Response Plan (EPRP)	<p>GenPGM will develop and implement an EPRP in accordance with appropriate federal and provincial regulations that will include the following elements:</p> <ul style="list-style-type: none"> • An emergency response policy – a concise policy that highlights the company's commitment to and support for the EPRP • Roles and responsibilities – the identification of those responsible for emergency preparedness and response plan coordination and planning • An emergency identification, prevention and protection process – the EPRP will define resources as necessary to identify potential emergency situations that may arise and document appropriate prevention and protection measures • An emergency notification procedure – a procedure to notify required personnel in the event of an emergency - will be in place
EA-MT18	Emergency Preparedness and Response Plan (EPRP)	<p>To mitigate the potential of project-related fires, GenPGM will:</p> <ul style="list-style-type: none"> • Install fire detection and alarm systems, where appropriate • Co-ordinate with local emergency response services • Design fire protection systems consistent with applicable codes and regulations • Equip remote buildings with portable extinguishers • Have a pumper truck on site equipped with a foam generation system • Prepare a fire response plan and conduct regular fire drills <p>Details regarding fire safety, prevention and response will be defined in the EPRP.</p>
EA-MT19	Emergency Preparedness and Response Plan (EPRP)	<p>To mitigate the potential for a process solids slurry or reclaim water pipeline failure, GenPGM will:</p> <ul style="list-style-type: none"> • Specify that the pipeline design considers appropriate safety factors • Route the pipelines in a manner that allows for access and inspection • Regularly inspect the pipeline • Position pipelines, where possible, to direct a release resulting from a failure into the TSF or other means of containment • Route pipelines away from sensitive environmental features, where practical • Install emergency catchment features (e.g., berms, ditches and catch basins) to manage the risk of failure that may result in the release of material to a sensitive environmental feature • Install a telemetric flow meter on the pipeline to monitor real-time pipeline flow rates <p>An ECA or EASR for industrial sewage in accordance with the Environmental Protection Act and the Ontario Water Resources Act will be obtained. Details regarding the measures to be followed in the event of a process solids slurry or reclaim water pipeline failure will be defined in the EPRP.</p>

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EA-MT20	Emergency Preparedness and Response Plan (EPRP)	<p>To mitigate the potential release of water from the MRSA Catch basins due to pipeline failure, GenPGM will:</p> <ul style="list-style-type: none"> • Connect the pump system to the backup power system • Develop a regular maintenance and inspection program for pump equipment • Locate replacement pumps on-site in the event of pump failure <p>An ECA or EASR for industrial sewage in accordance with the Environmental Protection Act and the Ontario Water Resources Act will be obtained.</p>
EA-MT21	Access Management	<p>To provide and manage access to the mine site, GenPGM will:</p> <ul style="list-style-type: none"> • Construct a new site access road joining the mine to Camp 19 Road • Construct and operate a site guard house (security) and gate near the entrance to the mine site, which will be staffed 24 hours a day, to restrict access to the site. • Maintain access to the Pic River via Camp 19 Road and to Bamooos Lake via the existing trail through Hare Lake • Implement a routine inspection program for Camp 19 Road during construction and periodically over the life of the Project • Develop a procedure for escorted access through the SSA to areas north of the mine site. This procedure will be developed prior to access being restricted to the SSA and will remain in place until operations cease, and the site is considered safe for public access
EA-MT22	Concentrate Transfer Station (Rail Load-Out Facility) Management	<p>If the rail load-out option is selected, it will contain the following design features:</p> <ul style="list-style-type: none"> • A concentrate storage building that is enclosed • Equip trucks with soft covers to prevent dusting during transport • Unload concentrate either by bottom dumping from the bottom of the trailer or as a side tip arrangement directly onto a concrete floor slab. Concentrate will be transferred to rail cars with a dedicated rubber-tired loader that remains within the load-out facility • Drainage capture points to hold spills or overfills at the facility • An appropriate setback distance and engineered controls to meet applicable air and noise criteria <p>To reduce potential noise and vibrations associated with the rail load-out facility, specific mitigation strategies will be implemented such as:</p> <ul style="list-style-type: none"> • Coupling concentrate rail cars at the rail load-out facility only during the daytime hours of 7:00 am to 7:00 pm • Limiting coupling of concentrate rail cars to allow the rail carrier to complete a pickup • Only couple concentrate rail cars in the zones where compliance with applicable NPC-300 impulsive noise criteria can be met
EA-MT23	Tailings Storage Facility (TSF) Operations	<p>To mitigate the potential for unanticipated seepage from the TSF, GenPGM will:</p> <ul style="list-style-type: none"> • Design the upstream surface and bedrock interface of the PSMF to be appropriately lined or sealed to decrease dam permeability, more specifically: <ul style="list-style-type: none"> ○ Install HDPE liner or better technology on upstream face of embankments where designed ○ Appropriately anchor liner material to manage seepage between the liner and permeable bedrock • Clean and inspect bedrock surfaces and treat them with slush grout where required • Develop a process solids deposition plan and management strategy aimed at maintaining potentially reactive Type 2 material in a saturated state to prevent oxidation

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		<ul style="list-style-type: none"> • Monitor seepage during and after operations, pursuant to the Water Monitoring Plan • Install seepage collection basins and ditches along the downstream toes of dams to intercept seepage water and runoff water from the embankments • Install groundwater monitoring wells downgradient of the TSF • An ECA or EASR for industrial sewage in accordance with the Environmental Protection Act and the Ontario Water Resources Act will be obtained. Details regarding the design of the TSF, including associated tailings impoundment operations and ARD/ML management, will be defined in the Operations, Maintenance and Surveillance Manual for the TSF
EA-MT24	Tailings Storage Facility (TSF) Operations	<p>To mitigate the potential of a TSF slope failure, conservative design criteria and design safeguards have been incorporated into the TSFF including:</p> <ul style="list-style-type: none"> • A design that meets or exceeds the requirements of the Lakes and Rivers Improvement Act and the Canadian Dam Association safety guidelines • Maintain an Engineer of Record for dam construction, raises and operation • Spillway design to allow controlled release of the intensity-duration-frequency (IDF) during all PSMF development stages • Install survey monuments on the crests of the embankments to monitor for potential settlement and/or movement and monitoring phreatic surfaces within the embankments • Reduce free standing water behind dam structures at closure • Complete dam safety inspections at appropriate intervals • Develop and implement an Operations, Maintenance and Surveillance Manual detailing regular monitoring, inspection and reporting requirements and emergency response measures in the event of upset operating conditions • Establish an Independent Tailings Review Board and engage Biigtigong Nishnaabeg in this effort • Sharing the Engineer of Record Dam Breach Assessment with Biigtigong Nishnaabeg <p>Details regarding the design of the TSF and geotechnical stability will be defined in the design summary report for the TSF.</p>
EA-MT25	Erosion And Sediment Control	<p>To mitigate adverse effects on erosion and sediment in receiving watercourses, including effects on sediment quality and benthos, GenPGM will:</p> <ul style="list-style-type: none"> • Reduce the potential loss of aquatic habitat through mine design by reducing the level of interaction between aquatic habitat features and Project infrastructure • Comply with water discharge requirements as defined in the Metal and Diamond Mining Effluent Regulations (MDMER) and Environmental Compliance Approval (provincial) • Employ standard management practices for erosion control such as: <ul style="list-style-type: none"> ○ Isolating disturbed areas with sediment fences, sediment curtains, or similar structures ○ Maintaining appropriate work area setbacks from surface water features ○ Grading and/or covering surfaces to reduce erosion potential ○ Controlling run-off from erosion-sensitive features ○ Providing settling ponds or basins in which solids can be collected (i.e., WMP and SWM Pond) ○ Promptly stabilize shoreline or banks disturbed by activities associated with the Project to prevent erosion and/or sedimentation,

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		<p>preferably through revegetation with native species appropriate for the site</p> <p>Details regarding the management of sediment quality and measures to protect benthos will be defined in the Erosion Prevention and Sediment Control Plan.</p>
EA-MT26	Erosion And Sediment Control	<p>To mitigate the potential of an MRSA slope failure and release of mine rock to the Pic River, the MRSA design criteria and safeguards will include:</p> <ul style="list-style-type: none"> • Slope angles that do not exceed the natural angle of repose and maintain a suitable factor of safety as defined by a professional engineer • Utilization of the natural site topography to support and contain the MRSA • Foundation will consist of bedrock or suitably competent material • Adequate setback from the Pic River <p>Details regarding the design of the MRSA and geotechnical stability will be defined in the design summary report for the MRSA</p>
EA-MT27	Fish and Fish Habitat	<p>To mitigate and compensate for adverse effects on fish and fish habitat, GenPGM will:</p> <ul style="list-style-type: none"> • Develop and implement an offset plan under Section 35(2) and Section 27.1 of MDMER of the <i>Fisheries Act</i> to offset project-related effects to fish and fish habitat and restoration of Streams 2, 3 and 6 after closure. This plan will be developed and accepted by DFO prior to the removal of fish habitat and will contain an implementation schedule. • Apply culvert design, installation and maintenance that follows and conforms to appropriate DFO and MNRF operational statements, guidance, interim codes of practice, and protocols including: <ul style="list-style-type: none"> ○ Sizing culverts to convey water under high flow conditions ○ Maintaining fish passage during low flow conditions ○ Embedding the culverts to allow the creation of natural substrates • Implement TSF discharge pipeline design that follows and conforms to appropriate DFO and MNRF operational statements, guidance and protocols including but not limited to: <ul style="list-style-type: none"> ○ Scheduling the constructing and decommissioning work to coincide with times of year that reduce risk to resident fish species as necessary (i.e., fisheries timing windows) ○ Avoiding where possible or maintaining setbacks and buffers from sensitive features, where necessary ○ Isolating access and work areas with temporary sediment control features such as berms and providing for the collection of drainage from disturbed areas ○ Restoring disturbed areas as soon as is practical following disturbance ○ incorporate an end-of-pipe screen compliant with the DFO guidelines, or a screen design otherwise approved by DFO • Implement management practices for work around water including: <ul style="list-style-type: none"> ○ Avoiding where possible or maintaining setbacks from sensitive features ○ Isolating work areas via temporary berms ○ Providing for the collection of drainage from disturbed areas in channels and settling basins ○ Restoration of disturbed areas as soon as is practical following disturbance • Implement management practices for work in water including: <ul style="list-style-type: none"> ○ Avoiding using explosives in or near water. Where this is necessary use the guidelines for the DFO <i>Guidelines for the Use of Explosives in</i>

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		<p><i>or Near Canadian Fisheries Waters</i> (Wright and Hopky 1998) to identify appropriate setback distances to avoid lethal or sub-lethal effects to fish</p> <ul style="list-style-type: none"> ○ Planning in-water work, undertaking or activity to respect timing windows to protect fish, including their eggs, juveniles, spawning adults, the organisms upon which they feed and migrate. ○ Where possible conduct instream work during periods of low flow (e.g., summer or winter) to further reduce the risk to fish ○ Whenever possible, operate machinery on land above the high-water mark, on ice, or from a floating barge in a manner that limits disturbance to the banks and bed of the waterbody ○ Adherence, as applicable, to the Interim Code of Practice for Temporary Cofferdams and Diversion Channels (DFO, 2020) ○ Prior to commencement of work, prepare and execute a fish salvage plan in discussion with responsible authorities <ul style="list-style-type: none"> • Water takings from local surface waters would incorporate an end-of-pipe screen compliant with the DFO guidelines, or a screen design otherwise approved by DFO • Limit access to waterbodies and banks to protect riparian vegetation and limit bank erosion • Allow controlled access to Claw Lake for baitfish collection • Focus fish monitoring programs on water bodies such as Pic River extending downstream of the Project site to the mouth of Lake Superior, Hare Lake, the outlet of Hare Creek at Port Munro and Stream 6 (Angler Creek) and the outlet at Sturdee Cove that are important VECs to Indigenous communities and work with associated communities to develop and implement the program. • Incorporate fish tissue sampling into the Country Foods Follow-up and Monitoring program • Incorporate 2021 and 2022 fish tissue sampling data into relevant monitoring programs • Offset the flow reduction and impact to fish and fish habitat in Stream 6/Angler Creek in the Fisheries Offsetting and Compensation Plan • Develop and implement a monitoring program with Biigtigong Nishnaabeg for Stream 6/Angler Creek prior to the start of construction to monitor the impact of changes to the watershed, if any, on (a) fish and fish habitat and other aquatic life in Angler Creek/Stream 6, as well as (b) other traditional and cultural uses of Stream 6/Angler Creek by Biigtigong Nishnaabeg • Engage and provide reasonable support to Biigtigong Nishnaabeg in designing community programs for fish and fish habitat offsetting as part of the Fish and Fish Habitat Offsetting and Compensation Plan • Support a Biigtigong Nishnaabeg Fish Hatchery program <p>Details regarding mitigation measures and compensation habitat to offset adverse effects on fish and fish habitat will be defined in the Updated Proposed Fish Habitat Offsetting Strategy and Compensation Plan and will include community-based Projects proposed by BN, PPFN and potentially other communities.</p>
EA-MT28	Atmospheric Quality Management	<p>To mitigate emissions of fugitive dust (TSP, PM10 , PM2.5), associated metals, and SO₂ emissions, GenPGM will:</p> <ul style="list-style-type: none"> • Maintain all site roadways in good condition, with regular inspections and timely repairs to reduce silt loading on the roads • Implement standard dust suppression activities such as water sprays, regular road maintenance and posting and monitoring of speed limits

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		<ul style="list-style-type: none"> • Apply water on roads and construction areas when conditions require and / or apply calcium or magnesium chloride to roads seasonally and when initial application is no longer achieving mitigation • Equip the concentrate handling facility with fugitive emission control technology • Load trucks with concentrate, during operation, in a covered environment • Reduce the amount of beach exposed in Cell 2 of the TSF and mitigate airborne dust by wetting or chemically stabilizing exposed beach areas with polymers and/or "crusting" agents as is safe and practicable • Maintain water cover on Cell 1 in the TSF during operations • Locate the primary crusher within an enclosed structure with an appropriate dust collection system • Cover the crushed ore stockpile • Install dust collection on the lime delivery, lime slaking and CMC feed bin systems • Control particulate emissions from the assay lab, assay furnace and cupel furnace with dust collectors • Provide scrubbers on the base metals fume hood and the assay lab AA unit • Reclaim, in a progressive manner as reasonable and practicable, exposed surfaces that are dust sources, especially during decommissioning and closure • Use low sulphur diesel for equipment • Implement a fuel use tracking system to identify anomalies in fuel use • Explore green technologies such as use of bio diesel and Trolley Assist • Use and properly maintain equipment that meets Transport Canada off-road emission requirements • Purchase new mining vehicles and mining equipment that meet US EPA Tier 4 emission standards • Implement an idling policy • Monitor air quality and fugitive dust from the site at sensitive receptors, including crystalline silica, nitrogen (NO₂), PM2.5 and PM10 and other constituents of potential concern. Monitoring will commence prior to construction • Aggregate crushing systems will include the use of water addition and water sprays to maintain moisture levels to effectively suppress and mitigate the generation of dust • Incorporating design features such as wind breaks to limit fugitive dust emissions • Measure silt content in access and haul roads <p>Details regarding the mitigation and management measures to be implemented to reduce air emissions from mobile and non-mobile equipment will be defined in an Atmospheric Quality Management Plan</p>
EA-MT29	Atmospheric Quality Management	<p>To mitigate the potential for effects from noise, GenPGM will:</p> <ul style="list-style-type: none"> • Purchase vehicles and equipment that meet the applicable noise suppression regulations • Prohibit tailgate slams when dumping materials • Schedule concentrate delivery at times of the day to reduce complaints whenever possible • Design curved portions of rail track at the Rail load-out Facility in a manner to reduce wheel squeal • Implement an overpressure and vibration monitoring program on site upon commencement of blasting operations, assessing and modifying the program as site- specific data becomes available. Mitigation measures include but are not limited to modifying blasting techniques, the use of blast mats, altering charge size and blasting frequencies. This

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		<p>plan will be prepared prior to blasting occurring and will be implemented for the course of blasting activities</p> <p>Details regarding the mitigation and management measures to be implemented to reduce noise emissions from mobile and non-mobile equipment will be defined in an Atmospheric Quality Management Plan</p>
EA-MT30	Atmospheric Quality Management	A formal complaints procedure for nuisance noise will be established for stakeholders and Indigenous peoples during the construction, operation, and decommissioning phases of the Project. A response protocol will also be established so that appropriate follow up occurs.
EA-MT31	Atmospheric Quality Management	<p>To reduce potential light emissions, specific mitigation strategies will be implemented such as:</p> <ul style="list-style-type: none"> • Optimization of lighting design to reduce total amount of lighting needed • Using directional lighting • Using shielded fixtures to reduce glare, reduce sideways and upward light leakage, and light pollution • Affixing fixtures on poles or buildings at the lowest possible height
EA-MT32	Surface Water Quality and Quantity	<p>To mitigate adverse effects on surface water quality, GenPGM will:</p> <ul style="list-style-type: none"> • Incorporate field test cells into the monitoring programs to inform water management and closure planning. Field test cells will be used once Run of Mine material becomes available • Protect L8 in situ • Plan activities near water such that deleterious materials including, but not limited to, paint, primers, blasting abrasives, rust solvents, degreasers, grout, or other chemicals do not enter the watercourse • Wash, refuel, and service machinery and store fuel and other materials for the machinery in a manner that prevents deleterious substances from entering the water • Implement a Spill Prevention and Contingency Plan. This plan will be prepared prior to site alteration • For operations, develop and implement appropriate operating practices for explosives and blasting operations to reduce nitrogen residuals in mine water • For operations, collection of water associated with the MRSA and management of these waters so that there will not be a routine discharge to the Pic River. Implement treatment measures so that effluent discharge meets applicable regulatory criteria • For operations, monitor constituent concentrations in MRSA catch basins and increase water transfer rates to WMP if concentrations exceed predicted levels • For operations, monitor and report on PGMs within effluent discharge • Maintaining the water management system in place during the closure phase of the Project until such time that water quality is suitable to release to the environment. • During the active closure phase, monitor pit lake quality as the lakes fills • Monitoring and management/treatment as required so that water discharge objectives are achieved as defined in the Environmental Compliance Approval (provincial) and the Metal and Diamond Mining Effluent Regulations • Work with the associated communities to develop and implement the program and develop a framework to share the results for the purpose of assessing the performance of the water management system. • During operations, use the water collection system for the Process Solids Management Facility (PSMF) to allow water to move south from the Pit to be managed within the PSMF.

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		<ul style="list-style-type: none"> Assess, with Biigtigong Nishnaabeg, technically and economically feasible supplemental flow options for Stream 6/Angler Creek during the operations Phase of the Project. Where economically feasible, GenPGM commits to minimize disruptions to Stream 6/Angler Creek during the operations Phase of the Project. Develop and implement, in conjunction with Biigtigong Nishnaabeg, a site-wide water management plan that provides an integrated framework to manage water quality that includes provision for water management practices for each of the primary site aspects, as well as areas of the site where there is contact water. The overarching goal of the plan is to maintain care and control of water during all mine phases for the purpose of protecting downstream uses (habitats, aquatic biota, use by people and preservation of Aboriginal rights). GenPGM'S environmental monitoring programs will have specific components related to mercury and phosphorus. Engage with Biigtigong Nishnaabeg in the design and implementation of the mercury monitoring plan and other site-wide water management plans and programs Obtain Biigtigong Nishnaabeg's approval of mercury monitoring plans. Develop and implement, in conjunction with Biigtigong Nishnaabeg, focused monitoring programs on waterbodies such as the Biigtig Zibi (Pic River) extending downstream of the Project site to the mouth of Lake Superior, the outlet of Hare Creek at Port Munro and Stream 6 (Angler Creek) and the outlet at Sturdee Cove that have significance to Indigenous communities. These programs will include the collection of surface water, sediment, benthic invertebrates, and fish tissue samples as well as monitoring for mercury, phosphorus, and other indicators of eutrophication, as well as toxicity testing for mill reagents prior to effluent discharge to receiving water bodies. GenPGM will establish reference areas on the Biigtig Zibi (Pic River) and other areas, upstream of the Project, for use in a comparative analysis of results. GenPGM will engage Biigtigong Nishnaabeg in the design and implementation of the water quality monitoring programs and commits to obtaining Biigtigong Nishnaabeg's approval of its proposed monitoring plans and programs. At all phases of Life of Mine, to implement best practices to prevent mercury methylation, such as stripping organic soils in advance of flooding an area. At all phases of Life of Mine, to collect additional up-to-date data to adequately characterize impacts to water quality, water resources and fish and fish habitat, specifically for the Biigtig Zibi (Pic River), and subwatershed 101. GenPGM will also monitor watersheds 102, and 103, which are largely overprinted by MRSA. At all phases of Life of Mine, to collect and update as necessary, a separate pit lake water quality model for each pit lake which considers various scenarios of rate of pit lake infilling, as well as the how other contact water inputs from the site could affect the pit lake models At all phases of Life of Mine, to engage with and support Biigtigong Nishnaabeg's water quality and aquatic monitoring efforts, including the development of adaptive management measures and associated triggers. Details regarding the management of surface water will be defined in the Surface Water Management Plan and the Erosion Prevention and Sediment Control Plan.
EA-MT33		<p>To mitigate adverse effects on surface water quantity, GenPGM will:</p> <ul style="list-style-type: none"> Appropriately size water management design features (e.g., retention and collection ponds, drainage infrastructure, ditches) to manage water volumes associated with storm and/or flow events

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		<ul style="list-style-type: none"> • Design the MRSA Catch basin to have storage capacity for the 1:100-year storm event. • Plan to discharge only that water from the site that is considered excess from a management/need point of view (e.g., recycle and re-use water as much as practical) • Diversion of surface water runoff from undisturbed areas away from disturbed areas • Discharge water from the site in a manner that is consistent with the natural hydrograph of the receiving water body • Monitor the quantity of water taken from Hare Lake, Pic River, or other surface water sources, along with flow triggers, as per PTTW requirements • Monitor the quantity of water discharged from the site • Restore natural drainage patterns to the extent possible at the end of the mine life • Details regarding the management of surface water, including water balance, intake and discharge, will be defined in the Water Management Plan. This plan will include triggers and thresholds for received waterbodies and reference lakes.
EA-MT34	Groundwater	<p>To mitigate adverse effects on groundwater quantity and quality, GenPGM will:</p> <ul style="list-style-type: none"> • Limit construction footprint (i.e., SSA) to the extent possible to reduce the potential for reductions in groundwater recharge and limit the number of watersheds overprinted by the SSA • Use standard management practices throughout the Project, including drainage control and excavation and open pit dewatering • Use standard construction methods, such as seepage cutoff collars, where trenches extend below the water table to mitigate preferential flow paths • Design the MRSA to increase the amount of runoff and reduce the amount of infiltration through the MRSA, thereby reducing the recharge and loading to groundwater • Monitoring locations will be maintained until the location is no longer required. If a monitoring location/station is no longer required but is identified as part of a regulatory approval, it will only be removed from the monitoring program once the required amendments are approved • Monitor groundwater levels and water quality in monitoring wells upgradient, cross-gradient, and downgradient of the MRSA, open pits, and PSMF, and in nearby key surface water features, to monitor for changes in groundwater quality and flow regime due to Project development • Monitor groundwater levels and water quality in background monitoring wells, through the use of nested groundwater monitoring wells that comprise a screen completed in overburden and shallow bedrock to monitor vertical distribution of groundwater level and quality, as applicable • Conduct a water supply well inventory along the stretch of properties along Highway 17 southwest of the SSA to confirm the number of users, well construction and the existing baseline groundwater quality conditions. This survey will be completed prior to site alteration • Develop a communication plan as part of the monitoring program to notify well users in the event of groundwater trigger thresholds being met • Collaborate with Biigtigong Nishnaabeg to identify any groundwater springs on the east site of SSA that are important to the community for consideration as part of the monitoring program • Complete a water well survey within and adjacent to the SSA to confirm the results of the MECP WWR and PTTW database review

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EA-MT35	Acid Rock Drainage and Metal Leaching Management	<p>To properly manage potential acid-generating mine rock, GenPGM will implement a mine rock segregation program that includes the following:</p> <ul style="list-style-type: none"> • Developing a detailed mine rock management strategy centering around the distribution of Type 1 (non-PAG) and Type 2 (PAG) materials, including the selection of materials to be used for mine site construction • Storing Type 2 rock in designated areas to allow for effective drainage management • Stockpiling Type 1 rock in the MRSA and only using Type 1 rock for site construction • Maintaining a sulfur content cut-off percentage of 0.18% that distinguishes Type 1 (non-PAG) and Type 2 (PAG) material • Developing a program of ongoing testing that will be carried out during operations to assess the metal leaching and acid-generating potential of mine rock being removed to confirm water quality predictions • Employ high precision GPS and associated technology on loading units to identify ore grades within the deposit to segregate Type 1 and Type 2 mine rock as it is mined from the open pits • Permanent storage of Type 2 rock in a saturated state to prevent ARD after closure <p>Details regarding the management of ARD / ML will be defined in Acid Rock Drainage / Metal Leaching Management Plan. This plan will be developed prior to potential Type 2 material being mined and will remain in place until operations cease, and all materials have been permanently covered.</p>
EA-MT36	Acid Rock Drainage and Metal Leaching Management	<p>To properly manage Type 1 and Type 2 process solids in the PSMF, GenPGM will:</p> <ul style="list-style-type: none"> • Sample Type 1 process solids during operations to verify the low sulphur content and confirm material as non-PAG • Separate Type 1 and Type 2 process solids in the Process Plant and manage separately in the PSMF • Permanently store Type 2 material below the water table • Cover Type 2 process solids with a minimum 2 m layer of Type 1 process solids in the PSMF at closure • Run humidity cell tests on Type 1 run-of-mill process solids to confirm water quality predictions • At all phases of Life of Mine, to undertake best efforts to avoid the temporary storage of type 2 waste rock. Where temporary storage is absolutely necessary due to emergency or risk to human health, GenPGM will ensure that type 2 waste rock requiring temporary storage has a storage location with sufficient capacity for the volume of material and that the water management pond has sufficient capacity for the volume of leachate to be collected. <p>Details regarding the management of the PSMF, including associated tailings impoundment operations and ARD / ML management, will be defined in the Operation, Maintenance and Surveillance Manual for the PSMF.</p>
EA-MT37	Vegetation Management	<p>To mitigate adverse effects on vegetation, GenPGM will:</p> <ul style="list-style-type: none"> • Optimize the location of the site infrastructure (e.g., pit development, aggregate and rock fill supply) and size of the footprint to reduce the potential effects on the environment • Transplant rare plants found on site to other local sites prior to disturbance of rare plant areas • Implement mitigation measures associated with dust creation, as noted under atmospheric quality management above • Construct a concentrate handling facility within a reduced footprint, and, if possible, within a previously disturbed or developed site

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		<ul style="list-style-type: none"> Implement a number of additional measures to reduce the effect of the transmission line (and access road) such as: <ul style="list-style-type: none"> Leaving vegetated buffer zones around watercourses and other sensitive features Leaving lower vegetation in place while harvesting larger trees Not grading or stripping within the transmission line corridor to the extent that the mitigation of potential fire hazards allows Hand-clearing vegetation at sensitive stream crossings and within erosion control zones to reduce soil disturbance Seeding the transmission line corridor and decommissioned roads at closure (consistent with the Closure Plan) Stabilizing disturbed soil to assist vegetation regrowth and to control erosion Development of the reclamation plan and progressive reclamation commencing as early in the site development process as practicable to provide early re- establishment of vegetation. This plan will be in place prior to construction in accordance with Ontario Regulation 240/00 Rehabilitation of as much of the mine site as possible to a natural even-aged conifer dominated forest after decommissioning Vegetation control measures consistent with provincial standards Re-vegetate approximately 275 ha of PSMF and 85 ha of the horizontal portion of the MRSA benches, augmenting with overburden and seed as needed. Incorporation of plant species of interest to Indigenous communities during rehabilitation where the use of these species is appropriate and technically feasible Removing buildings and covering other disturbed surfaces with overburden as needed, and seed at closure (consistent with the Conceptual Closure Plan) Implement specific mitigation measures to prevent establishment of invasive species such as: <ul style="list-style-type: none"> Implementing an invasive species awareness and control program, including requirements for vehicles to enter site in a clean state Use manual/mechanical treatment for the removal of invasive species as an alternative to herbicides Isolating sensitive areas until adequate native vegetation is established through reclamation Maintaining healthy, non-invasive, vegetative cover wherever possible on site Managing areas with exposed soil to prevent the establishment of unwanted vegetation in disturbed/high traffic areas Evaluating the quality control of reclamation seed mixes so that seed mixes are of high quality Progressive reclamation of disturbed lands
EA-MT38	Wildlife And Species at Risk Management	<p>To mitigate adverse effects on wildlife during construction, GenPGM will:</p> <ul style="list-style-type: none"> avoid, where practical, clearing of vegetation during bird nesting and bat breeding season. If avoidance is not feasible, surveys will be conducted by a qualified biologist in accordance with appropriate regulatory protocols
EA-MT39	Wildlife And Species at Risk Management	<p>To mitigate adverse effects on wildlife throughout the life of the Project, GenPGM will implement the following general wildlife mitigation measures:</p> <ul style="list-style-type: none"> Reclamation plans that aim to restore forest habitat Posting speed limits on roads to reduce collisions

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		<ul style="list-style-type: none"> • Sufficiently clear ROW to provide adequate lines of sight to give advance warning of wildlife, particularly on corners • Installing wildlife crossing signs at the beginning of the main access road coming from both directions and at strategic locations, as necessary • Driver training to reduce risk of collision • Plowing practices in winter that provide gaps where mammals can easily exit the road (OMNR 2013) • Recording of wildlife collisions and near misses and developing additional mitigations should a collision hot spot be identified • Decommissioning roads and transmission line by re-establishing vegetation consistent with the Caribou Conservation Plan • Stabilizing disturbed soil to assist vegetation regrowth and to control erosion • Removing animal remains from active mining areas and mine roads to protect raptors and scavengers who might feed on them • Establishment of a wildlife policy and training, including SAR awareness training, to reduce human interaction with wildlife and decrease the potential for habituation, including strict waste management protocols to limit human food sources for wildlife • (e.g., bird feeders, waste management practices) • Designing the site infrastructure to reduce the area of the disturbed footprint therefore reducing habitat alteration with special attention paid to sensitive habitats (i.e., water crossings) • Prior to disturbance of amphibian habitat, prepare and execute an amphibian salvage and translocation plan in discussion with responsible authorities • Avoiding direct impacts to identified raptor nesting areas and contacting a qualified avian biologist for direction • Maintaining the embankments of the PSMF to be free of vegetation to limit attraction by waterfowl and/or wildlife • Use of visual and auditory bird deterrents around PSMF, once operational • Using directional lighting • Installing luminescent and/or reflective markers on transmission lines over Canoe Lake where there is greater risk of collision due to the topography and presence of waterbodies • Clearing vegetation within 50 m of the side of building with windows to reduce potential bird abundance and collisions, where practical • Proper handling and disposal of road salt, reagents used in ore processing, or other substances that may be attractive to moose or other mammals craving dietary salt or trace minerals.
EA-MT40	Wildlife And Species at Risk Management	<p>To mitigate adverse effects on nesting birds, GenPGM will implement the following wildlife mitigation measures:</p> <ul style="list-style-type: none"> • All clearing will be completed in accordance with the Migratory Bird Convention Act, Fish and Wildlife Conservation Act and other applicable guidance thereunder • Where possible, tree and brush clearing will be scheduled outside the bird nesting season • Where tree and brush clearing occur during the migratory bird nesting season, areas that are to be cleared will be surveyed for nest sites, and any identified nests will be marked, and appropriate protections put in place to prevent such trees from being harvested at that time • Conduct surveys for common nighthawk and eastern whip-poor-will, as part of the Wildlife Management Plan

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Tracking No.	Category	Commitment
EA-MT41	Wildlife And Species at Risk Management	<p>To mitigate adverse effects on bats and bat habitat, GenPGM will implement the following wildlife mitigation measures:</p> <ul style="list-style-type: none"> • Avoiding forest clearing during the window May 15 to August 31 to reduce the risk of destruction of bat occupied maternity trees. • If limited clearing must be done during this window, bat maternity surveys using the Significant Wildlife Habitat and Wind Project Protocol would be used to confirm bat presence/absence in any suitable trees (e.g., large diameter chicots) and appropriate protection measures applied • Installation of a minimum of five (5) bat or rocket boxes as an alternate form of maternity roost in LSA • Develop an annual monitoring program to determine occupancy of bat boxes • Suspended construction/operation activities if a bat hibernaculum is discovered until a plan can be put in place with a qualified biologist in consultation with MECP, as part of the Wildlife Management Plan <p>The Best Management Practices for Bats in British Columbia will inform the development of these measures.</p>
EA-MT42	Wildlife And Species at Risk Management	<p>To decrease potential effects on Woodland Caribou habitat, GenPGM will implement the following on-site mitigation measures:</p> <ul style="list-style-type: none"> • Reducing the design footprint of the mine and associated infrastructure • Plant and seed access roads and remove watercourse crossings when roads are no longer required, to the extent practical • Suspended construction/operation activities if individual caribou are observed until caribou have left the area and the observation reported to the MNRF • Prohibition of hunting by Project personnel at the Project site to avoid risk of inadvertent caribou mortality due to misidentification or poaching • Prohibition of recreation snowmobile and ATV / UTV use by Project personnel at the Project site • Posting educational signage at the start of the access road to increase awareness of the potential presence of caribou to reduce the potential for collisions, encourage reporting, and reduce accidental hunting mortality. • Pits and trenches that are not geologically important will be backfilled or contoured to a stable angle of repose and, if greater than 3 m deep, will provide at least one sloped ramp as a point of egress for caribou • Non backfilled pits or trenches >3m deep will be fenced unless a means of egress for caribou is provided by a sloped ramp • Disturbed bedrock will be stockpiled on site in a safe and stable manner • Non-merchantable timber and slash will be piled at appropriate locations along trails and roads to reduce predator sight lines and foraging efficiency. Trails will be otherwise left for natural regeneration <p>The development of these measures will be informed by the ECC's Environmental Code of Practice for Metal Mines, the Range Management Policy in Support of Woodland Caribou Conservations and Recovery, and the Recovery Strategy for Woodland Caribou.</p>
EA-MT43	Wildlife And Species at Risk Management	<p>To benefit off-site Woodland Caribou, GenPGM will implement the following off-site mitigation measures to be developed in consultation with MNDMNRF and Biigtigong Nishnaabeg:</p> <ul style="list-style-type: none"> • Selection of locations for rehabilitation that will provide connectivity, consider landscapes on a regional scale, and builds off the long-term caribou and forest management plan for the region

Commitment List and Information		
Tracking No.	Category	Commitment
		<ul style="list-style-type: none"> Enhanced silviculture (e.g., aerial/ground spray, infill planting, seeding, clearing, tending, slash pile burning, etc.) and road decommissioning, where appropriate An effectiveness monitoring program that will focus on the success of the silviculture treatments Conduct an aerial survey of the RSA west of Pukaskwa Engage in consultation with Biigtigong Nishnaabeg to revise current off-site caribou mitigations to consider the current landscape, and cultural proposals from Biigtigong Nishnaabeg. <p>Details regarding off-site mitigation for Woodland Caribou will be defined in the Updated Caribou Habitat Offset Mitigation Report and will be further developed with MECP and Indigenous communities. The development of these measures will be informed by, the Range Management Policy in Support of Woodland Caribou Conservations and Recovery, and the Recovery Strategy for Woodland Caribou, which will be approved by MECP through an Overall Benefit Agreement. The timing of this agreement will be determined in consultation with MECP.</p>
EA-MT44	Reclamation and Closure	<p>The draft Closure Plan includes activities designed so that the mine site is decommissioned and closed in a manner that reduces the potential effects on the social and natural environments and, to the extent possible, returns the site to a land use that is supported by Indigenous peoples, the public, government and wildlife including:</p> <ul style="list-style-type: none"> Restoring the natural drainage patterns as much as possible Directing drainage from the pit lake under the MRSA in an underdrain Taking reasonable steps to reclaim some disturbed areas of the Project site in a progressive manner, including re-establishment of vegetation conditions supportive of Woodland Caribou, monarch and yellow-banded bumble bees where possible Incorporate wildflower seed mix and common milk weed into the re-vegetation plan to provide potential habitat for Monarch butterfly and Yellow-banded bumble bee Incorporate wetland habitat into the restoration of the water management pond Maintaining overall MRSA slopes of approximately 2.3 horizontal:1 vertical (2.3H:1V), with minor re-contouring of the overall slopes at closure Contouring slopes of the PSMF at closure, reducing standing water on PSMF, establishing a vegetative cover, decommissioning, and dismantling management and process solids slurry pipeline systems, ongoing monitoring to confirm suitable water quality, overflow at closure preferred to Stream 6 Decommissioning roads to the extent possible while maintaining access to the site for necessary closure and long-term land uses Use of overburden on horizontal surfaces of the MRSA to promote revegetation as a proactive reclamation strategy, when necessary Use of non-merchantable coarse woody debris from site clearing in rehabilitation efforts Removing and/or covering concrete foundations with overburden to support revegetation Rehabilitating the general mine site area through a process of scarification of heavily compacted areas, regrading, applying overburden cover as needed, and revegetation Incorporate species of interest to Indigenous communities in reclamation activities Monitoring during closure will include:

Commitment List and Information		
Tracking No.	Category	Commitment
		<ul style="list-style-type: none"> ○ Monitoring to verify success of reclamation and confirm on-site water quality has stabilized and there are no long-term geochemistry concerns ○ Monitoring pit water quality prior to pit overflow to determine if mitigation is required and monitoring water discharged from the pits to surface water for a suitable time period after overflow • Details regarding decommissioning and closure of the mine site following completion of operations will be provided in a Closure Plan in accordance with O. Reg 240/00 and filed with the Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNRF) prior to the start of construction. Identified Indigenous groups will be invited to participate in the preparation of the closure plan through information sharing and direct participation in selection of long-term reclamation projects. • Engaging Biigtigong Nishnaabeg in end land use planning for the Project site and will ensure the site is designed to support habitats and species of interest to Biigtigong Nishnaabeg. • Obtain Biigtigong Nishnaabeg's consent to the closure plan as expressed in a Band Council Resolution • On an ongoing basis, to review feasible closure plan alternatives with Biigtigong Nishnaabeg
EA-MT45	Reclamation and Closure	<p>To monitor the long-term groundwater level and quality in PSMF Cell 2a during closure of the PSMF, GenPGM will implement the following:</p> <ul style="list-style-type: none"> • Installation of groundwater monitoring wells and vibrating wire piezometer in the process solids contained in Cell 2A at the start of the closure phase • Groundwater level data will be compared to predicted levels to confirm that Cell 2A is performing as designed. Importantly, it will be confirmed that the Type 2 (PAG) process solids contained in Cell 2A continue to remain in a saturated state to prevent the generation of acid drainage • Groundwater quality data will be collected (from within the PSMF) to verify water quality predictions for Cell 2A and to evaluate the effectiveness of the mitigation measures implemented for the Type 2 process solids • In the event the groundwater monitoring program identifies an issue with the performance of Cell 2A, the following contingency measures could be implemented to maintain the groundwater table at the required level: • Closure spillway invert elevations could be increased to retain additional water in the Cell 2A pond during the spring freshet resulting in increased net infiltration into the process solids • An engineered cover could be placed over a portion of Cell 2A to reduce surface evaporation and increase infiltration into the process solids <p>Details regarding the monitoring program for PSMF Cell 2A, including the triggers for implementation of contingency measures, will be provided as part of the Water Management Plan.</p>
EA-MT46	Soil Salvage and Storage	<p>To manage soil on site during site preparation and construction, and to provide available soils for decommissioning and closure of the site, GenPGM will:</p> <ul style="list-style-type: none"> • Provide results of 2021 soil sampling to the Panel and use results to inform the design of the access road and management plan for the storage of excess materials • Limit the construction footprint to the extent possible to minimize the need for soil/overburden excavation. • Strip topsoil to the extent possible to be stockpiled in the same area as the overburden and subsequently used following construction during mine life for progressive reclamation and closure to restore disturbed areas

Commitment List and Information		
Tracking No.	Category	Commitment
		<ul style="list-style-type: none"> • Ensure that soil/overburden stockpiles that are created to facilitate development of the site have appropriate slopes, and maintaining the piles to prevent erosion and slide hazard • Limiting potential erosion of disturbed areas and / or soil stockpiles by implementing appropriate erosion and sediment control measures (i.e., seeding) to stabilize these areas <p>Details regarding the soil monitoring and management, including monitoring for constituents of potential concern, will be provided as part of the Soil and Terrain Monitoring Program.</p>
EA-MT47	Socio-Economic Conditions	<p>To mitigate potential socio-economic effects, GenPGM will:</p> <ul style="list-style-type: none"> • Provide adequate housing to accommodate the workforce during the site preparation and construction phase through a temporary construction camp, to be operated by a third party • Provide adequate housing to accommodate the workforce during operation through an Accommodations Complex with a minimum of 180 rooms, to be operated by a third party • Establish and enforce a code of conduct for workers housed in the Accommodations Complex and work with the third-party developer of the temporary construction camp to establish and enforce a similar code of conduct. The code of conduct will be established prior to the commencement of site construction • Facilitate rotational work arrangements which allow some employees to return to distant housing during operations • Work proactively with municipal authorities to co-ordinate planning, development or upgrades of infrastructure, as necessary • During decommissioning, implementing strategies to help transition the workforce • Work with economic development groups to increase contracting opportunities for local businesses throughout the life of the Project • Work with regional institutions to implement employment and training programs, including the development of a program focusing on underrepresented populations • Establishing measures to encourage and recruit employees from the existing populations in local communities • Providing opportunities for training to facilitate employment by residents of the LSA and RSA and supporting initiatives to train local youth and members of Indigenous groups • Work with economic development groups to increase contracting opportunities for local businesses • Providing Project employees with health services (physical, mental and social health), including Employee Assistance Programs (EAP) and on-site emergency service infrastructure, including fire-fighting equipment. GenPGM will co-ordinate its EPRP with the Town of Marathon emergency services department • Develop, in collaboration with Biigtigong Nishnaabeg, a mandatory, cultural competency training for all mine workers that will include content on Residential Schools, the Truth and Reconciliation Commission, Missing and Murdered Indigenous Women and Girls, and Indigenous rights, including Biigtigong Nishnaabeg's asserted exclusive Aboriginal title rights. • Develop and implement, in collaboration with Biigtigong Nishnaabeg, workplace policies and procedures to address and minimize risks associated with related sexual harassment, violence, harassment and discrimination. Providing support to fund key community services or organizations and provide fitness and recreational programs for workers within the existing facilities.

Commitment List and Information		
Tracking No.	Category	Commitment
		<ul style="list-style-type: none"> • GenPGM will engage with the Town of Marathon and provincial Crown lands permit holders to address potential disturbance to or access restrictions to municipal and Crown land areas • Signage will be installed around the SSA to alert the public and land users of the presence of the Project and its facilities. Signage will be installed during construction • Hunting / fishing / harvesting of wildlife will be strictly prohibited on the site. Workers will not be permitted to hunt / fish / harvest and will not be permitted to bring firearms or angling gear to site • Implement a Harvester Training Fund to support trapline training programs • To the extent possible, clearing and wood utilization will follow the requirements contained in the Forest Management Plan. This may include a commercial market for the harvested wood from the Project site or may be used for firewood for the general public. Un-merchantable wood, as defined by the Crown Forest Sustainability Act, may be left scattered throughout the harvested area to serve as coarse woody debris. • Project activities, locations, and timing will continue to be communicated to Indigenous communities, affected land and resource users, environmental non- government organizations, the provincial government, and local authorities throughout the life of the Project • Desired land and resource end-uses will be considered in the preparation of the Rehabilitation and Closure Plan
EA-MT48		<p>To mitigate potential traffic effects, GenPGM will implement the following mitigation measures:</p> <ul style="list-style-type: none"> • Bussing of employees and shift changes in consultation with the Town of Marathon • Scheduling concentrate delivery to the rail load-out facility (if this option is used) in consultation with the Town of Marathon • Scheduling shift changes and truck movements to avoid peak traffic hours and school bus pick-up and drop-off times. • Regular communications with the Town of Marathon, MTO, and OPP representatives to monitor and mitigate traffic effects • Implementing a Traffic Management Plan, which will include encouraging car-pooling and providing bus transport to and from the Project site and requiring all Project drivers and employees to observe speed limits and take safety precautions. This plan will be developed prior to construction.
EA-MT49	Archaeology and Cultural Heritage	<p>To mitigate potential effects on physical and cultural heritage resources, GenPGM will:</p> <ul style="list-style-type: none"> • Complete an additional area of Stage 2 archaeological assessment in 2021, prior to construction, if the final alignment of the discharge pipeline remains in close proximity to the area of high archaeological potential on Hare Lake, however avoidance of this area is the preferred mitigation measure. Any archaeological work would be completed in accordance with the MHSTCI's Standards and Guidelines for Consultant Archaeologists. • Invite local Indigenous communities to participate in archaeological field work programs (i.e., as field monitors) and to review and inform the assessment of any findings resulting from this work • Train all employees engaged in activities that have the potential to unearth heritage or cultural features • Immediately suspend all work in the vicinity of the discovery in the instance that built heritage and cultural heritage landscape features are identified and contact the MHSTCI and Indigenous peoples

Commitment List and Information		
Tracking No.	Category	Commitment
		<ul style="list-style-type: none"> • Immediately suspend all work in the vicinity of the discovery in the instance that human remains are identified and notifying the OPP, or local police and also notifying Indigenous representatives, the MHSTCI • Notify stakeholders and local Indigenous peoples as part of its routine response to the identification of built heritage and cultural heritage landscape features <p>Details regarding measures to protect archaeological resources and to identify the procedures to be followed where archaeological resources are identified or in the unlikely event that human remains are encountered during construction will be defined in the General Construction and Operations Management plan (per EMMP).</p>
EA-MT50	Occupational Health and Safety	<p>Occupational health and safety to be implemented and followed in accordance with all applicable legislation and regulations.</p> <ul style="list-style-type: none"> • As part of the General Construction and Operations Management Program, develop a procedure for recording operation health and safety incidences and near misses and the identification of potential hazards

APPENDIX B – EA Approval

ENVIRONMENTAL ASSESSMENT ACT

SECTION 9

NOTICE OF APPROVAL TO PROCEED WITH THE UNDERTAKING

RE: An Environmental Assessment for the Marathon Platinum Group Metals and Copper (Palladium) Mine Project

Proponent: Generation PGM Inc.

EA File No.: EA 05-09-03

EAIMS No.: 11010

TAKE NOTICE that:

Having considered the purpose of the *Environmental Assessment Act*, the “Report of the Joint Review Panel for the Marathon Palladium Project”, Joint Review Panel Agreement, as amended and Harmonization Order, the environmental impact statement dated June 2012 and environmental impact statement addendum dated, January 2021 and consultation with Indigenous Groups, I hereby give approval to proceed with the Project (the “Approval”), subject to the conditions set out below.

REASONS

- (1) The Environmental Assessment has been prepared in accordance with the Environmental Impact Statement guidelines issued by the federal Minister of the Environment on August 9, 2011.
- (2) The effects of the Project were carefully assessed by the Joint Review Panel in an open and transparent process that included extensive opportunities for input and participation by Indigenous Groups, stakeholders, government agencies and the public, including a public hearing.
- (3) The Joint Review Panel prepared and submitted a report, in accordance with the terms of reference set out in the Joint Review Panel Agreement dated August 9, 2011, as amended, detailing conclusions related to its assessment of the Project and recommendations to address concerns and mitigate adverse effects.
- (4) I have considered the Joint Review Panel report and potential impacts of the Project on the environment and Indigenous Groups, and I am satisfied that the conditions of this Approval are necessary to implement the recommendations of the Joint Review Panel and mitigate adverse effects from the Project.
- (5) I am further satisfied that giving approval to proceed with the Project is consistent with the purpose of the *Environmental Assessment Act* given:
 - a. the socio-economic benefits of the Project;
 - b. the measures to mitigate adverse environmental effects of the Project and impacts on Indigenous Groups, including the Proponent's Commitments, the conditions of this Approval, and the proposed conditions of approval under federal environmental assessment legislation; and
 - c. accommodation measures for impacted Indigenous Groups, where appropriate.

CONDITIONS

The Approval is subject to the following conditions:

1. Definitions and Interpretation

1.1 For the purposes of the Approval:

"Active Closure Phase" means the phase of the Project during which the Proponent permanently ceases commercial production and commences removal from service of any components of the Project and continues until the Proponent completes the reclamation of the Site.

"Caribou" means caribou (boreal population) (*Rangifer tarandus caribou*).

"Closure Plan" means a plan prepared under Part VII of the Mining Act to rehabilitate the site or mine hazard.

“Commitments” means all the Proponent’s commitments set out in Appendix 2 of the Joint Review Panel Report.

“Construction” means physical construction activities associated with the Project, including: Site preparations that involve clearing, grubbing, stripping, grading topsoil and organic materials (trees, stumps, and other debris); drilling and blasting for access roads, sample and monitoring wells; excavating rock materials; building temporary construction support facilities such as a construction office, maintenance shop, servicing facilities for drinking water, waste management and electricity generation and transmission, housing to accommodate workers during the pre-construction and construction phase, but does not include the tendering of contracts.

“Construction Phase” means the phase of the Project during which the Proponent undertakes the site preparation, building or installation of any components of the Project, including periods during which these activities may temporarily cease.

“Contact Water” means any water, including seepage or surface runoff, that has come into contact with any component of the Project at the Site, including mine rock, process solids, infrastructure and terrain.

“Cultural Heritage Resources” includes archaeological resources, built heritage resources and cultural heritage landscapes.

“Date of Approval” means the date on which the Order in Council pertaining to the approval of the Project was signed by the Lieutenant Governor.

“Days” means calendar days.

“Director” means the Director of the Environmental Assessment Branch of the MECP.

“District Manager” means the Manager of the MECP’s Thunder Bay District Office.

“EAB” means the Environmental Assessment Branch of the MECP.

“Environmental Assessment” means the documents titled “Marathon Platinum Group Metals-Copper Project Environmental Impact Statement- Main Report”, dated June, 2012 (Canadian Impact Assessment Registry Reference Number 54755, Document Number 224) and “Marathon Palladium Project Environmental Impact Statement Addendum”, dated January, 2021 (Canadian Impact Assessment Registry Reference Number 54755, Document Number 727), and all of the Proponent’s written submissions to the Joint Review Panel, and includes all amending documents for any changes to the Project approved under Condition 7.

“Environmental Assessment Act” means the *Environmental Assessment Act*, R.S.O. 1990, c. E.18.

“Harmonization Order” means the order issued under s. 3.1 of the Environmental Assessment Act, dated, August 8, 2011, as amended.

“Indigenous Groups” means the following Aboriginal Peoples: Biigtigong Nishnaabeg, Ginoogaming First Nation, Jackfish Métis Association, Region 2 of the Métis Nation of

Ontario, Michipicoten First Nation, Netmizaaggamig Nishnaabeg, Pays Plat First Nation, and Red Sky Métis Independent Nation.

“Joint Review Panel” means the review panel for the Project established under the *Canadian Environmental Assessment Act, 2012* and by agreement between the federal Minister of Environment and Climate Change and the provincial Minister of the Environment, Conservation and Parks.

“Joint Review Panel Report” means the report of the Joint Review Panel submitted on August 2, 2022, to the federal Minister of Environment and Climate Change and provincial Minister of the Environment, Conservation and Parks (Canadian Impact Assessment Registry Reference Number 54755, Document Number 1301).

“MECP” means the Ministry of the Environment, Conservation and Parks.

“Operations Phase” means the phase of the Project starting when commercial production begins and continuing until the start of decommissioning. This phase includes periods when commercial production may temporarily cease.

“Platinum Group Metals” means the elements platinum, ruthenium, rhodium, palladium, osmium, and iridium.

“Post Closure Phase” means the phase of the Project when decommissioning and final reclamation activities other than follow-up program monitoring are complete.

“Procedure B-1-5” means the MECP report detailing the procedures to establish receiving-water based effluent requirements for point source discharges to surface waterbodies.

“Project” means the Marathon Palladium Project, as described in section 4 of the Joint Review Panel Report and includes any changes thereto as may be approved by the Director under Condition 7.

“Proponent” means Generation PGM Inc. and its successors or assigns.

“Regional Director” means the Director of the MECP’s Northern Region.

“Site” means the geographic area occupied by the Project, delineated in “site study area” in Figure 4-1 and Figure 4-2 of the Joint Review Panel Report.

“Site Study Area” has the same meaning as described in section 4.2 of the Joint Review Panel Report.

“Technical Support Manager” means the Manager of Technical Support for the MECP’s Northern Region.

“Type 1 Mine Rock Materials” means rock material derived from rock such as tailings which standard testing has determined will not be potentially acid generating.

“Type 2 Mine Rock Materials” means rock material derived from rock such as tailings which standard testing has determined to be potentially acid generating.

- 1.2 For the purposes of these conditions and the Commitments, any reference to “adaptive management” or “adaptive management strategy” shall include at a minimum:
- (a) the development of triggers and thresholds that define the levels of environmental change relative to baseline that would require the Proponent to implement modified or additional mitigation measure(s), including instances where the Proponent may require Project activities causing the environmental change to be stopped; and
 - (b) the identification of alternative and additional mitigation measures that would be applied if the relevant trigger and threshold is reached.

2. General Requirements

- 2.1. The Proponent shall implement the Project in accordance with the Environmental Assessment, which is hereby incorporated into this Notice of Approval by reference, except as provided in the conditions of this Notice of Approval and as provided in any other approval, permit, authorization, or decision statement that may be issued by a government authority for the Project.
- 2.2. The Proponent shall fulfill all of its Commitments, except as provided in the conditions of this Notice of Approval and as provided in any other approval, permit, authorization, or decision statement that may be issued by a government authority for the Project.
- 2.3. Should the Proponent wish to make a change to any document, plan, program or measure that is required by a condition of this Notice of Approval to be developed in consultation with specified groups or entities or to the satisfaction of a specified government official, the Proponent shall comply with any such requirements in the condition in making the change, unless otherwise specified in writing by the specified government official or, if no official is specified, the Director.
- 2.4. For any document required by the conditions of this Notice of Approval to be prepared, submitted, or posted publicly by the Proponent, the Director may determine that the Proponent is no longer required to do so, in which case the requirement ceases to apply. The Director will notify the Proponent in writing should the Director make such a determination.
- 2.5. Where a condition of this Notice of Approval requires that the Proponent develop, implement, submit or otherwise take certain steps regarding a plan, program, measure or other thing within a specified timeframe (e.g., within 30 Days) or before other actions can be taken (e.g., prior to Construction), the Proponent shall do so subject to any other timeframe that is specified in writing by the government official(s) mentioned in the relevant condition or, where no such official is specified, by the Director.
- 2.6. Where a condition of this Notice of Approval requires the Proponent to carry out an activity post-closure, the Proponent shall continue to carry out such activity until such time that the Director notifies the Proponent in writing that it is no longer required to do so.
- 2.7. The conditions of this Notice of Approval do not prevent more restrictive conditions being imposed under other statutes or regulations.

3. Public Record

- 3.1. Where a document is required to be prepared by the conditions of this Notice of Approval, the Proponent shall, unless otherwise specified in writing by the Director, post the document on the Proponent's website and shall provide one hardcopy and one electronic copy of the document to the Director and District Manager as well as Biigtigong Nishnaabeg and other Indigenous Groups.
- 3.2. The environmental assessment Reference Number 11010 and File Number EA 05-09-03 shall be quoted on all documents submitted to the MECP pursuant to this Notice of Approval.
- 3.3. For every document submitted to the MECP, the Proponent shall clearly identify which condition of this Notice of Approval the document is meant to fulfill.

4. Compliance Monitoring Program

- 4.1. The Proponent shall prepare and submit to the Director for approval and for the public record an environmental assessment compliance monitoring program.
- 4.2. The compliance monitoring program shall be submitted to the Director within 90 Days of the Date of Approval, or such other date as may be agreed upon by the Director in writing.
- 4.3. The compliance monitoring program shall include a description of how the Proponent will:
 - (a) monitor implementation of the Project in accordance with the Environmental Assessment with respect to mitigation measures, public consultation, and additional studies and work to be carried out;
 - (b) monitor compliance with the conditions of this Notice of Approval; and
 - (c) monitor compliance with all Commitments with respect to mitigation measures, consultation with Indigenous Groups and the public, and additional studies and work to be carried out.
- 4.4. The compliance monitoring program shall include an implementation schedule for monitoring activities to be completed.
- 4.5. The Director may require the Proponent to amend the compliance monitoring program at any time. Should an amendment be required, the Director will notify the Proponent in writing of the required amendment and the date by which the Proponent must complete and submit the amendment to the Director.
- 4.6. The Proponent shall submit the amended compliance monitoring program to the Director within the time period specified by the Director in the written notice.
- 4.7. The Proponent shall implement the compliance monitoring program, including any amendments to it.

5. Compliance Reporting

- 5.1. The Proponent shall prepare an annual compliance report describing the results of the compliance monitoring program required by Condition 4 and shall submit each report to the Director for review and the public record, in accordance with the requirements of this Condition 5.
- 5.2. The first annual compliance report shall describe the results of the compliance monitoring program for the period of one year from the Date of Approval and each subsequent report shall describe the results of the compliance monitoring program for each subsequent one-year period.
- 5.3. The Proponent shall submit each annual compliance report to the Director by no later than 30 Days following each anniversary of the Date of Approval, unless otherwise specified in writing by the Director.
- 5.4. The Proponent shall submit annual compliance reports until all conditions in this Notice of Approval are satisfied or the Proponent is instructed otherwise in writing by the Director.
- 5.5. The Proponent shall notify the Director in writing when the final annual compliance report is being submitted. The MECP will confirm whether or not the annual compliance reporting requirements in Conditions 5.1 to 5.4 have been fulfilled and the Director will confirm this in writing to the Proponent.
- 5.6. The Proponent shall retain, either on the Site or in another location approved by the Director, a copy of each annual compliance report that has been submitted to the Director until such time as the Director determines that the Proponent is no longer required to do so. The Director will notify the Proponent in writing should the Director make such a determination.
- 5.7. Within 30 Days of submitting each annual compliance report to the Director, the Proponent shall post the annual compliance report on its website.
- 5.8. The Proponent shall make each annual compliance report that has been submitted to the Director, and any associated documentation, available to any MECP designate in a timely manner when requested to do so.

6. Complaint Protocol

- 6.1. The Proponent shall prepare a complaint protocol for dealing with and responding to inquiries and complaints during all stages of the Project. The complaint protocol shall include a procedure for notifying the Regional Director of any complaints received by the Proponent. Without limiting the generality of the foregoing, the protocol shall address all complaints and responses during the Construction Phase, Operations Phase, Active Closure Phase and Post Closure Phase.
- 6.2. The Proponent shall submit the complaint protocol to Biigtigong Nishnaabeg and other Indigenous Groups for consultation and comment, and to the Director for approval and for the public record at least 90 Days before the start of Construction or such other date as may be specified by the Director in writing.

- 6.3. The Director may require the Proponent to amend the complaint protocol at any time. Should an amendment be required, the Director shall notify the Proponent in writing of the amendment required and when the amendment must be completed.
- 6.4. The Proponent shall submit an amended complaint protocol to the Director within the time period specified by the Director.
- 6.5. The Proponent shall implement the complaint protocol and any amendments to it during all stages of the Project.
- 6.6. The Proponent shall include a summary of any complaints received and how they were addressed in the annual compliance reports required by Condition 5.

7. Changes to Project

- 7.1. If the Proponent wishes to make any change to the Project after the Date of Approval, the following process shall apply:
 - (a) The Proponent shall notify the Director, Biigtigong Nishnaabeg and other Indigenous Groups in writing of the proposed change and provide them with a brief description of it.
 - (b) The Proponent, in consultation with Biigtigong Nishnaabeg and other Indigenous Groups shall assess any potential environmental effects of the proposed change, and identify the net effects, any adverse impacts on Biigtigong Nishnaabeg and other Indigenous Groups, any additional mitigation measures that may be required, any proposed monitoring and any other matters that may be specified by the Director in writing. The Proponent shall describe this information, along with the description of the proposed change, in a document prepared for submission to the Director (the "Amendment Document"). The document will specify that, if the proposed change is approved by the Director, the proposed change would form part of the Project approved under the *Environmental Assessment Act* and will identify which section(s) of the Environmental Assessment would be amended.
 - (c) The Proponent shall consult with Biigtigong Nishnaabeg, other Indigenous Groups, the MECP, other relevant government agencies and affected parties, including by providing a notice that includes a summary of the proposed change(s), opportunities for comment and how to access the Amendment Document. The consultation shall include a minimum 30-day review and comment period, or such other consultation as may be required by the Director in writing.
 - (d) The Proponent shall make the Amendment Document available on its website prior to the start of the consultation and comment period and shall provide copies to Biigtigong Nishnaabeg and other Indigenous Groups.

- (e) The Proponent shall consider and address any comments or concerns received as part of the consultation process and make any appropriate updates to the Amendment Document.
- (f) The Proponent shall ensure that the Amendment Document includes a record of consultation that describes in detail how the Proponent has fulfilled the requirements of clauses (c) and (e).
- (g) The Proponent shall submit the updated Amendment Document to the Director. The MECP will review the updated Amendment Document and may conduct additional consultation, as it considers appropriate. The Director may require that the Proponent provide additional information or undertake additional consultation with respect to the proposed change.
- (h) After the MECP has completed its review of the updated Amendment Document, and any additional information has been provided and consultation has been undertaken to the satisfaction of the Director, the Director will consider the MECP review, and any concerns raised during the consultation process and may:
 - (i) give approval to proceed with the change subject to any conditions that the Director considers appropriate; or
 - (ii) refuse to give approval to proceed with the change.
- (i) The Director will give the Proponent and any Indigenous Groups that were consulted notice of their decision, together with reasons for it.

7.2. If the Director gives approval to proceed with a change to the Project, the Proponent shall:

- (a) post a copy of the updated Amendment Document, together with a copy of the Director's approval, on its website for the duration of the Project; and
- (b) implement the change in accordance with the Director's approval and any conditions imposed by the Director.

8. Duration of Approval

- 8.1. If the Proponent has not commenced the Project within 10 years of the Date of Approval, this Notice of Approval shall expire, unless extended by the Minister of the Environment, Conservation and Parks.
- 8.2. If the Proponent has not commenced the Construction Phase within five years of the Date of Approval, the Proponent shall carry out the following:
 - (a) Before commencing the Construction Phase, the Proponent shall conduct a review, in consultation with Biigtigong Nishnaabeg and other Indigenous Groups, to determine if the impact assessment and significance of residual effects set out in the Environmental Assessment remain accurate for the Project and to identify any changes to the effects prediction,

mitigation measures and significance of residual effects in the Environmental Assessment; and

- (b) At least 90 days before the commencement of the Construction Phase, the Proponent shall,
 - i. prepare a report that details the review specified in clause (a), including the consultation carried out with Biigtigong Nishnaabeg and other Indigenous Groups; and
 - ii. submit the report to the Director, Biigtigong Nishnaabeg and other Indigenous Groups and post the report on its website.

9. Aquatic Environment

Geology

- 9.1. The Proponent shall develop and implement to the satisfaction of the Technical Support Manager, mitigation measures for Type 1 Mine Rock Materials and Type 2 Mine Rock Materials that include:
 - (a) undertaking field-scale testing of geological materials prior to and during the Operations Phase to refine metal leaching and acid rock drainage predictions and updating the management of Type 1 Mine Rock Materials and Type 2 Mine Rock Materials as necessary;
 - (b) prior to the Construction Phase, undertaking field scale testing of geological materials to inform preliminary predictions of Platinum Group Metals in effluent and the receiving environment using exploration drill core data;
 - (c) during the Construction Phase, using results of field-scale testing specified in clause (b) to inform preliminary predictions of Platinum Group Metals in effluent and receiving environment using exploration drill core data;
 - (d) undertaking field-scale testing of geological materials during the Operations Phase to further inform and confirm preliminary predictions of Platinum Group Metals in effluent and the receiving environment using exploration drill core data and material generated from mining;
 - (e) conducting testing of effluent, water, and sediment quality in Hare Lake, Biigtig Zibi (Pic River), and Stream 6 (Angler Creek) during the Construction Phase, Operations Phase and Post Closure Phase to verify predictions of Platinum Group Metals release rates;
 - (f) conducting geochemical testing of waste rock and source material during the Construction Phase and Operations Phase, using the results of field-scale testing specified in clause (b) to assess mercury releases in effluent and receiving environment with respect to low-level method detection

limits for water of 0.1 ng/L for total mercury and 0.02 ng/L for methylmercury, using exploration drill core data and material generated by mining;

- (g) during the Construction Phase and the Operations Phase, using the results from the geochemical testing specified in clause (f) to inform and update water and sediment quality predictions for mercury across the Site;
- (h) separating Type 1 Mine Rock Materials and Type 2 Mine Rock Materials during the Construction Phase, Operations Phase and Active Closure Phase;
- (i) developing and implementing a monitoring program, including sampling methods and frequencies, to correctly identify Type 1 Mine Rock Materials and Type 2 Mine Rock Materials during the Construction Phase and Operations Phase;
- (j) updating mine rock block model to inform sorting of Type 1 Mine Rock Materials and Type 2 Mine Rock Materials during the Construction Phase and Operations Phase;
- (k) managing Type 1 Mine Rock Materials and Type 2 Mine Rock Materials separately in the process solids management facility during the Operations Phase and Active Closure Phase;
- (l) using only Type 1 Mine Rock Materials for Construction;
- (m) avoiding temporary storage of Type 2 Mine Rock Materials , unless not technically feasible, during the Construction Phase, Operations Phase, Active Closure Phase and Post Closure Phase; if avoiding temporary storage is not technically feasible, ensuring the temporary storage location has sufficient capacity for the volume of rock, that the temporary storage area is located where all runoff and seepage can be contained and directed to the water management pond and that the water management pond has sufficient capacity for the volume of leachate and runoff collected from the temporary storage location;
- (n) storing Type 2 Mine Rock Materials in designated areas during the Construction Phase, Operations Phase, Active Closure Phase and Post Closure Phase that allow for effective drainage, including permanent storage in a saturated state to prevent acid rock drainage; and
- (o) developing ongoing effluent, receiving water and seepage monitoring program to evaluate Platinum Group Metals concentrations as well as other parameters considered relevant during the Construction Phase, Operations Phase, Active Closure Phase and Post Closure Phase.

9.2. The Proponent shall submit the mitigation measures referenced in condition 9.1 to the Technical Support Manager District Manager for review as follows:

- (a) the mitigation measures specified in the following clauses shall be submitted during the pre-submission consultation process associated with applications for Environmental Compliance Approvals: clauses (d), (e), (g) and (o) of condition 9.1; and
 - (b) the mitigation measure specified in clauses (l) and (j) of condition 9.1 shall be submitted during the Operations Phase.
- 9.3. The Proponent shall use the most current release rate predictions and concentrations to inform Site-specific Platinum Group Metals effluent criteria during permitting and approval processes with relevant government authorities.

Groundwater Quantity and Quality

- 9.4. The Proponent shall implement measures to limit seepage from the process solids management facility during the Operations Phase, Active Closure Phase and Post Closure Phase, including at a minimum:
- (a) constructing a geomembrane liner, or better technology, tied into bedrock on the upstream face of the perimeter embankments (dams);
 - (b) grouting fractured bedrock; and
 - (c) intercepting any shallow seepage with seepage collection basins or other suitable measures subject to the approval of the Technical Support Manager and District Manager around the perimeter of the process solids management facility and returning it back to the water management pond or process solids management facility.
- 9.5. The Proponent shall develop, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups and relevant government authorities, and implement a groundwater monitoring and follow-up program for the Construction Phase, Operations Phase, Active Closure Phase and Post Closure Phase of the Project that will: verify the accuracy of the predictions made during the Environmental Assessment and in follow up programs to support permitting; verify the effectiveness of mitigation measures; and implement an adaptive management strategy. The monitoring and follow-up program shall be developed to the satisfaction of the Technical Support Manager and District Manager prior to the Construction Phase and shall include at a minimum:
- (a) Refinement of the predicted effects of the Project on groundwater quality and quantity by:
 - i. collecting pre-Construction baseline groundwater quality information for Platinum Group Metals and all other potential contaminants;
 - ii. further refining the groundwater model used in the Environmental Assessment as more baseline data accumulates to support permitting and approval applications; and

- iii. adjusting the groundwater model predictions, particularly those related to groundwater travel times, which could affect contaminant loading to surface water receiving waters;
 - (b) measurement of groundwater levels during the Construction Phase, Operations Phase and Active Closure Phase to document changes in water levels and flows in nearby surface water features in response to dewatering of the open pits and construction and operation of the process solids management facility and mine rock storage area;
 - (c) monitoring of groundwater quantity and quality in wells upgradient, downgradient, and cross-gradient of the mine rock storage area, process solids management facility, and open pit in addition to groundwater monitoring wells along the predicted flow paths of seepage from these mine features in the Environmental Assessment during the Construction Phase, Operations Phase, Active Closure Phase and Post Closure Phase; and
 - (d) a comparison of results with requirements established through permitting and with predictions in the Environmental Assessment. Additional mitigation may be implemented if it is determined that the Project results in water quality or quantity measurements that exceed limits established by authorizations under the *Environmental Protection Act* or *Ontario Water Resources Act*.
- 9.6. The Proponent shall develop, during the Construction Phase and to the satisfaction of the Technical Support Manager, and implement a contingency plan for groundwater quality and quantity that includes at a minimum:
- (a) Trigger levels for groundwater quality and quantity that require implementation of contingency measures; and
 - (b) A description of the contingency measures that will be implemented if trigger levels are exceeded, including monitoring requirements and mitigation measures.
- 9.7. The Proponent shall develop, in consultation with Biigtigong Nishnaabeg, other Indigenous groups and relevant government authorities, and implement a drinking water monitoring and follow-up program for the Construction Phase, Operations Phase, Active Closure Phase and Post Closure Phase that will verify the accuracy of the predictions made during the Environmental Assessment and in follow up programs to support permitting, verify the effectiveness of mitigation measures, and implement an adaptive management strategy. The monitoring and follow-up program shall be developed to the satisfaction of the Technical Support Manager and District Manager prior to the Construction Phase and shall include at a minimum:
- (a) a water supply well inventory, prior to the Construction Phase, of the stretch of properties along Highway 17 southwest of the Site Study Area to confirm the number of users, well construction, and existing baseline groundwater quality conditions;

- (b) consultation with Biigtigong Nishnaabeg to identify any groundwater springs on the east side of Site Study Area that are important to the community for consideration in the monitoring program;
 - (c) review and enhancement (as necessary) of the monitoring well network and program established as part of the groundwater monitoring and follow-up program referenced in condition 9.5 to ensure appropriate up-, down- and cross-gradient coverage of key mine infrastructure in relation to drinking water wells and groundwater springs;
 - (d) annual updates to the groundwater model referenced in condition 9.5 using the most recent groundwater monitoring data and water consumption/use data to address the potential impacts to the drinking water wells for the stretch of properties located along Highway 17 southwest of the Site Study Area, including pumping at the water supply wells;
 - (e) an adaptive management strategy; and
 - (f) a communication plan to notify well users in the event of exceedance of groundwater trigger thresholds that are established by authorizations under the *Ontario Water Resources Act*.
- 9.8. The Proponent shall develop, during the Construction Phase and to the satisfaction of the Technical Support Manager, and implement a contingency plan for drinking water wells that includes at a minimum:
- (a) Trigger levels for contaminants in drinking water that require implementation of contingency measures; and
 - (b) A description of the contingency measures that will be implemented if trigger levels are exceeded, including monitoring requirements and mitigation measures.

Surface Water Quantity and Quality

- 9.9. The Proponent shall implement mitigation measures to prevent or reduce effects of the Project on surface water quantity, including:
- (a) recycling Contact Water for use as process water during the Operations Phase;
 - (b) using a water management system to manage water volumes and attenuate discharges during the Construction Phase and Operations Phase;
 - (c) discharging water in a manner that replicates natural conditions during the Construction Phase, Operations Phase and Active Closure Phase;
 - (d) implementing measures to reduce the potential for scouring and erosion in downstream watercourses in all subwatersheds identified in Figure 8-1

of the Joint Review Panel Report during the Construction Phase, Operations Phase and Active Closure Phase; and

- (e) in consultation with Indigenous Groups, restoring natural drainage patterns within the Site Study Area to the extent possible during the Active Closure Phase and Post Closure Phase.
- 9.10. The Proponent shall develop, in consultation with Bigtiigong Nishnaabeg, other Indigenous Groups and relevant authorities, a flow monitoring plan for the Biigtig Zibi (Pic River) which shall include the establishment of low flow thresholds to identify extreme dry conditions. The monitoring plan shall be developed to the satisfaction of the Technical Support Manager and District Manager prior to the Construction Phase and shall include at a minimum:
- (a) the methodology, location(s), frequency and duration of flow monitoring in Biigtig Zibi;
 - (b) an adaptive management strategy;
 - (c) provision for the establishment of an upstream monitoring station relative to any potential effects of the Project;
 - (d) low flow triggers for extreme dry conditions in Biigtig Zibi using the Water Survey of Canada station data as a baseline data set, and;
 - (e) direction that, if a low flow trigger has been reached, the Proponent shall reduce or cease taking water from Biigtig Zibi.
- 9.11. The Proponent shall implement the flow monitoring plan described in condition 9.10 during the Construction Phase, Operations Phase, Active Closure Phase and Post-Closure Phase.
- 9.12. The Proponent shall develop, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups and relevant government authorities, a Site-wide water management plan and surface water quantity monitoring and follow-up program that will verify the accuracy of the predictions made during the Environmental Assessment and to support permitting, verify the effectiveness of mitigation measures, and implement an adaptive management strategy. The Site-wide water management plan and surface water monitoring and follow-up program shall be developed to the satisfaction of the Technical Support Manager and District Manager prior to the Construction Phase and shall include at a minimum:
- (a) collection of monitoring data for water level (at an in-situ data collection frequency of 15-minutes, data logger downloads monthly frequency) and flow (at a manual measurement frequency of monthly) during the Construction Phase, including:
 - i. water level monitoring data for Hare Lake, Terru Lake, Lake 8, Lake 12, Lake 5, Malpa Lake, and Lake 19 in subwatershed 104, or at such lakes as may otherwise be specified in writing by the Technical Support Manager;

- ii. flow (and water level with rating curve) monitoring data at stations S-8, S-9, S-10, S-11, or at such stations as may otherwise be specified in writing by the Technical Support Manager;
 - iii. flow and water level monitoring data at stations S-1, S-2, S-3, S-4, S-6, S-11, S-13, S-14, S-31, station S-24, and station S-25, or at such stations as may otherwise be specified in writing by the Technical Support Manager, and developing rating curves for those stations;
 - iv. establishment of flow reference stations and water level reference stations and commencement of data collection; and
- (b) designing infrastructure to have the capacity to contain at least the 1 in 100-year, 24-hour storm event from the corresponding drainage area.
- (c) continuous monitoring of water quantity to compare to reference stations and predicted effects including:
 - i. measurement of water quantity, level, flow gauging, and depth and flow profiling, at point-source discharge locations and receiving water bodies, including Lake 1, Lake 2, Lake 5, Lake 8, Lake 12, Malpa Lake, Terru Lake, Hare Lake, Hare Creek, Stream 6 (Angler Creek; hydrometric station S-14 and S-31) and Lake 19 in subwatershed 104, or at such waterbodies as may otherwise be specified in writing by the Technical Support Manager.
 - ii. monitoring at various times of the year, consistent with provincial permitting requirements;
 - iii. monitoring at reference stations that would not be impacted by the Project;
 - iv. continuous monitoring of effluent volumes contained within all infrastructure to confirm that risk of overtopping will not occur; and
 - v. designing the mine rock storage area catch basins and the associated pumps to prevent overflows to Biigtig Zibi as a result of the Project during the Construction Phase, Operations Phase, Active Closure Phase and Post-Closure Phase.
- (d) annual comparison of the results of monitoring with the predictions of the Environmental Assessment and applicable regulatory criteria or permitting and approvals requirements; and
- (e) implementation of additional mitigation measures if the results of monitoring indicate that effects are greater than predicted in the Environmental Assessment or if either of the following trigger thresholds are reached:
 - i. a trigger threshold of 100-year flood flows for flow increase; and

- ii. a trigger threshold of two consecutive months during which there is a decrease in average daily flows between the reference stations and the impacted stations of greater than 20 percent (for water bodies that are not covered under authorizations under the *Fisheries Act*).
- 9.13. The Proponent shall implement the surface water quantity monitoring and follow-up plan described in Condition 9.12 during the Construction Phase and during the Operations Phase, Active Closure Phase and Post-Closure Phase.
- 9.14. Prior to the Construction Phase, the Proponent shall, in consultation with Biigtigong Nishnaabeg, Pays Plat First Nation, other Indigenous Groups and relevant government authorities, identify any and all technically and economically feasible options for water supplementation for Stream 6 (Angler Creek) to minimize disruptions to this waterbody without adversely affecting other water sources. The Proponent shall implement any optimal option(s) during the Construction Phase, Operations Phase and the Active Closure Phase to minimize disruptions to this waterbody without adversely affecting other water sources, unless otherwise authorized.
- 9.15. The Proponent shall develop, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups and relevant government authorities, control measures for erosion and sedimentation in the Site Study Area to prevent effects on the quality of water frequented by fish. The control measures for erosion and sedimentation shall be developed to the satisfaction of the Technical Support Manager and District Manager prior to the Construction Phase and shall include at a minimum:
 - (a) consideration of current and future climate scenarios relevant to the Project, including periods of flooding, heavy rainfall and frost, when designing and implementing these measures;
 - (b) maintenance and regular inspection, subject to safety requirements, of all erosion and sediment control measures, and documentation and repair of any defective or damaged control measure as soon as circumstances permit;
 - (c) conducting progressive reclamation concurrently over all phases of the Project to stabilize and vegetate any disturbed areas as soon as possible after the disturbance; and
 - (d) development of a Site-wide construction environmental monitoring plan to document all erosion and sedimentation control measures across the Site.
- 9.16. The Proponent shall implement the control measures for erosion and sedimentation described in Condition 9.15 during the Construction Phase and during the Operations Phase and Active Closure Phase.
- 9.17. The Proponent shall, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups and relevant government agencies, develop a water quality monitoring plan for the Operations Phase, Active Closure Phase and Post Closure Phase for each pit lake to assist with the development of mitigation measures to protect the Biigtig Zibi

(Pic River). The Proponent shall submit the plan to the ministry's regional Technical Support Manager and District Manager prior to Operations Phase. The plan shall be developed to the satisfaction of the Technical Support Manager.

- 9.18. The Proponent shall implement the water quality monitoring plan described in condition 9.17 for each pit lake, commencing with the filling of the pit lake and continuing through the Post Closure Phase.
- 9.19. The Proponent shall, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups and relevant government authorities, develop mitigation measures to prevent mercury mobilization, release to surface water bodies and biological uptake. The mitigation measures shall be developed to the satisfaction of the Technical Support Manager prior to the Construction Phase and shall include at a minimum maintaining a minimum 30 m vegetated buffer zone between cleared areas and waterbodies except where the Technical Support Manager and the Proponent agree that maintaining the buffer zone is not practical for Project infrastructure.
- 9.20. The Proponent shall implement the mitigation measures described in Condition 9.19 prior to and during the Construction Phase, Operations Phase and Active Closure Phase.
- 9.21. The Proponent shall, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups and relevant government authorities, develop a mercury monitoring program to investigate potential changes in total mercury and methylmercury during the Project that include triggers to assess the significance of the impact and identify potential mitigation strategies. The monitoring program shall be developed to the satisfaction of the Technical Support Manager prior to the Construction Phase.
- 9.22. The Proponent shall implement the mercury monitoring program described in Condition 9.21 prior to and during the Construction Phase and during the Operations Phase and Active Closure Phase.
- 9.23. The Proponent shall develop, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups and relevant government authorities, and implement a Site-wide water quality monitoring and follow-up program to verify the accuracy of the predictions made during the Environmental Assessment to support permitting, verify the effectiveness of mitigation measures, and implement an adaptive management strategy. The Site-wide water quality monitoring and follow-up program shall be developed to the satisfaction of the Technical Support Manager prior to the Construction Phase and shall include at a minimum:
 - (a) pre-Construction sampling of water quality in Hare Lake, Hare Creek, the Biigtig Zibi and Stream 6 (Angler Creek), including:
 - i. collection of additional baseline data for benthic communities, fish tissue contaminant levels (small and large-bodied), sediment, and all water quality parameters measured during the 2008–2012 and 2013–2019 sampling campaigns;
 - ii. collection of baseline data for Platinum Group Metals using low-level method detection limits;

- iii. collection of baseline mercury and methylmercury data with method detection limits;
 - (b) monitoring of waterbodies, construction water, mine effluent, seepage water and any other Contact Water during the Construction Phase and Operations Phase to compare against predicted effects, including monitoring at a minimum:
 - i. water quality in Hare Lake, Biigtig Zibi (extending downstream of the Project to the mouth of Lake Superior), Stream 5 (Hare Creek) to its outlet at Port Munro, and Stream 6 (Angler Creek) to its outlet at Sturdee Cove and appropriate reference water bodies as approved by the MECP;
 - ii. total ammonia and un-ionized ammonia in Hare Lake;
 - iii. dissolved oxygen in Hare Lake, the Biigtig Zibi, and Stream 6 (Angler Creek);
 - iv. methylmercury in Hare Lake, the Biigtig Zibi, and Stream 6 (Angler Creek);
 - v. Platinum Group Metals in mine effluent to be discharged into Hare Lake; and
 - vi. acute toxicity and sub-lethal toxicity to fish in mine effluent to be discharged in Hare Lake;
 - vii. total phosphorus in Hare Lake, Stream 5 (Hare Creek), Stream 6 (Angler Creek) and Biigtig Zibi;
 - (c) an evaluation in accordance with Procedure B-1-5, of the worst-case mixing zone size with respect to the discharge scenario in Hare Lake to support the Mixing Zone Assessment as part of the provincial approvals process; this evaluation may include the lowest 7-day average inflow/outflow condition to/from Hare Lake that has a return period of 20 years (as well as the 1 in 20 dry year lake level) to evaluate the predicted effects, as applicable; and
 - (d) implementation of additional mitigation measures should the results of monitoring indicate that the effects are greater than predicted or mitigation measures are not effective.
- 9.24. The Proponent shall develop, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups and relevant government authorities, and implement a monitoring and follow-up program to validate the effects predicted by the mixing model for Hare Lake as described in the Environmental Assessment and the further evaluation required by condition 9.23 (c). The program shall be developed to the satisfaction of the Technical Support Manager prior to the Construction Phase and shall include at a minimum:

- (a) monitoring the thermal regime of Hare Lake during the Operations Phase;
- (b) implementing additional mitigation measures as necessary to ensure that the natural process of temperature stratification and mixing is maintained, unless otherwise authorized; and
- (c) an adaptive management strategy.

Fish and Fish Habitat

- 9.25. The Proponent shall comply with the timing windows for Northwest Region set out in Ontario's In-water Work Timing Window Guidelines (2013) and Fisheries and Oceans Canada's Ontario Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat (2017) when conducting work in or within 30m of any waterbody to protect fish, including their eggs, juveniles, spawning adults, the organisms upon which they feed, and where they migrate. The Proponent shall:
- (a) complete work in or within 30m of any waterbody during periods of low flow (e.g., summer, fall, or winter) to further reduce the risk to fish and their habitat or to allow the work to be isolated from flows; and
 - (b) minimize work in or within 30m of any waterbody during wet, windy, and rainy periods that may increase erosion and sedimentation.
- 9.26. The Proponent shall develop, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups, Fisheries and Oceans Canada, MECP and other relevant government authorities, and implement a fish and fish habitat, and fish population monitoring and follow-up program to verify the predictions in the Environmental Assessment related to fish and fish habitat and determine the effectiveness of mitigation measures, including offsetting. The Proponent shall at a minimum:
- (a) address existing gaps in baseline needed to inform the follow-up program and determine adaptive management thresholds and success thresholds, including a sampling plan to address these gaps with timelines associated with data collection relative to anticipated effects of the Project;
 - (b) explicitly identify areas of uncertainty in the effects predictions and how the monitoring program would address those by pairing each with measurable physical or biological parameters;
 - (c) determine the parameters, including flow, surface water level, groundwater quality, groundwater level, sediment, benthic communities, and fish communities, that need to be monitored in order to verify the predictions of effects on fish and fish habitat, and fish populations;
 - (d) monitor the parameters in clause (c) to verify the predictions of effects on fish and fish habitat during operation, active closure and post-closure, including but not limited to: Hare Lake, the Biigtig Zibi extending downstream of the Project to the mouth of Lake Superior, Stream 5 (Hare Creek) to its outlet at Port Munro, and Stream 6 (Angler Creek) to its outlet at Sturdee Cove, and any corresponding reference stations

(representative of the potentially impacted location), and any other locations identified by government authorities that will provide continuous monitoring data; and

(e) an adaptive management strategy.

9.27. The Proponent shall, prior to the Construction Phase and in consultation with Biigtigong Nishnaabeg, Pays Plat First Nation, and other Indigenous Groups, develop a monitoring program for Stream 6 (Angler Creek) to verify the predictions in the Environmental Assessment and effectiveness of any mitigation measures as it pertains to impacts of the Project on the use for traditional purposes and the cultural heritage of Biigtigong Nishnaabeg, Pays Plat First Nation and other Indigenous Groups. The Proponent shall incorporate fish species that are representative of fish present and of interest to local communities into the monitoring program. The Proponent shall, in consultation with Biigtigong Nishnaabeg, Pays Plat First Nation, and other Indigenous Groups, implement the monitoring plan during the Construction Phase, Operations Phase, Active Closure Phase and Post Closure Phase.

9.28. The Proponent shall, prior to the Construction Phase and in consultation with Biigtigong Nishnaabeg and other Indigenous Groups, Fisheries and Oceans Canada, the Ministry of Natural Resources and Forestry and other relevant authorities, conduct fish sampling surveys to confirm the presence of Northern brook lamprey (*Ichthyomyzon fossor*) in Streams 1, 2 and 3.

10. Terrestrial Environment

Reclamation

10.1. As part of progressive reclamation specified in the Commitments, the Proponent shall, in consultation with Biigtigong Nishnaabeg and other Indigenous Groups, the Ministry of Natural Resources and Forestry and other relevant government authorities, utilize a diverse mixture of native plant species for revegetation that prioritizes reforestation and includes:

- (a) trees and shrubs;
- (b) species of value to forest birds and waterfowl as identified in the Environmental Assessment;
- (c) species of value to moose (*Alces alces*) and other mammals of interest to Indigenous Groups, as identified by Indigenous Groups; and
- (d) plant species of interest to Indigenous Groups, as identified by Indigenous Groups; and
- (e) species known to aid in the reestablishment of ecosystems by improving the physical environment through their contributions to shade, litter accumulation, and moisture retention.

- 10.2. The Proponent shall, prior to the Operations Phase and in consultation with Biigtigong Nishnaabeg and other Indigenous Groups, the Ministry of Mines, the Ministry of Natural Resources and Forestry, and other relevant government authorities, develop a final reclamation plan for the Project that addresses the following matters:
- (a) performance standards to be used by the Proponent to evaluate the effectiveness of final reclamation activities, including standards for:
 - i. restoration of natural drainage patterns within the Site to as close to baseline as technically and economically feasible;
 - ii. self-sustaining ecosystems, including even-aged conifer forest;
 - iii. habitat for moose (*Alces alces*) and other mammals of interest to Indigenous Groups, as identified by Indigenous Groups;
 - iv. habitat for birds and waterfowl as identified in the Environmental Assessment, that are informed by bird and waterfowl survey results collected pursuant to condition 10.7;
 - v. habitat for bats; and
 - vi. species of interest to Indigenous groups, as identified by Indigenous Groups;
 - (b) a description of final reclamation measures to be implemented, including how these measures will address performance standards referred to in condition 10.2.(a); and
 - (c) a monitoring and follow-up program developed by the Proponent to verify the effectiveness of the reclamation measures referred to in clause (b), including whether performance standards referred to in clause (a) are met. The monitoring and follow up program shall include an adaptive management strategy.
- 10.3. The Proponent shall develop the final reclamation plan specified in condition 10.2 to the satisfaction of the Nipigon District Manager of the Ministry of Natural Resources and Forestry, for such matters that related to the mandate of the Ministry of Natural Resources and Forestry.
- 10.4. The Proponent shall implement the final reclamation plan specified in condition 10.2 during the Active Closure Phase.

Closure Plan

- 10.5. Prior to submitting a Closure Plan for filing under section 141 of the *Mining Act* or an amendment to a Closure Plan for filing under section 143 of the *Mining Act*, the Proponent shall not submit a consultation report to the Director of Mine Rehabilitation or seek notice from the Director that he or she is satisfied that appropriate consultation with Indigenous communities has been carried out, pursuant to s. 8.1(9)

of O. Reg. 240/00 under the Mining Act, unless Biigtigong Nishnaabeg has provided the Proponent with confirmation of its consent to the Closure Plan or amendment to the Closure Plan, as expressed in a Band Council resolution.

- 10.6. Prior to the Operations Phase, the Proponent shall assess, in consultation with Biigtigong Nishnaabeg, any technically and economically feasible alternative to discharging water from the north pit lake into the Biigtig Zibi (Pic River) during the Active Closure Phase and Post Closure Phase. If the Proponent identifies any technically and economically feasible alternative(s), the Proponent shall propose a change to the Project in accordance with condition 7 for the optimal alternative(s) and implement the change, if approved by the Director. If the Proponent cannot identify a technically and economically feasible alternative, the Proponent shall notify Biigtigong Nishnaabeg and the Director of the reasons for their determination that a such an alternative could not be identified.

Wildlife

- 10.7. The Proponent shall, prior to disturbance of amphibian habitat, develop an amphibian salvage and translocation plan that identifies receiving locations. The plan shall be developed to the satisfaction of the relevant Ministry of Natural Resources and Forestry district manager, and then implemented as specified in the plan.
- 10.8. The Proponent shall not undertake vegetation clearing and blasting required for the Project during the period of May 1 to August 31, unless the Proponent determines that vegetation clearing and blasting outside this period is not technically or economically feasible. If the Proponent makes such a determination, the Proponent shall develop, in consultation with Biigtigong Nishnaabeg and other Indigenous Groups, the Ministry of Natural Resources and Forestry and the MECP's Species at Risk Branch and other relevant government agencies and implement mitigation measures for vegetation clearing and blasting.
- 10.9. The Proponent shall, prior to the Construction Phase and in consultation with Biigtigong Nishnaabeg, other Indigenous Groups, Environment and Climate Change Canada and the Ministry of Natural Resources and Forestry, ensure that the Wildlife and Migratory Bird follow up and monitoring programs specified in the Commitments include:
 - (a) an adaptive management strategy;
 - (b) a description of how the baseline survey results for birds and waterfowl identified in the Environmental Assessment will be updated based on further surveys conducted by the Proponent;
 - (c) a description of how updates to survey information along with baseline survey results will be used to inform reclamation in the final reclamation plan referenced in condition 10.2;
 - (d) a description of pre-Construction habitat characterization for Canada warbler (*Cardellina canadensis*), Eastern wood-pewee (*Contopus virens*), olive-sided flycatcher (*Contopus cooperi*), evening grosbeak

(*Coccothraustes vespertinus*), common nighthawk (*Chordeiles minor*); and rusty blackbird (*Euphagus carolinus*);

- (e) determination of the need for additional modelling for habitat suitability to verify the accuracy of the Environmental Assessment on Canada warbler (*Cardellina canadensis*) and if it is determined there is a need, a description of the additional modelling that will be conducted by the Proponent; and
- (f) a description of the monitoring of common nighthawk (*Chordeiles minor*), forest birds and waterfowl populations that will be carried out by the Proponent during the Construction Phase and Operations Phase at locations based on baseline surveys conducted as part of the Environmental Assessment, as indicated in Section 4.2.2 of the Terrestrial Environment Baseline Report Update (Canadian Impact Assessment Registry Reference Number 54755, Document Number 722) and pre-Construction habitat characterization results in clause (d).

10.10. The Proponent shall ensure that mitigation measures in the Wildlife and Migratory Bird follow up and monitoring programs are informed by survey results specified in clauses (b) to (f).

Caribou

10.11. The Proponent shall undertake a comprehensive assessment of impacts to Caribou and Caribou habitat based on the final footprint and timing of Construction and operation of the Project and shall develop and implement mitigation measures regarding Caribou and their habitat. In doing so, the Proponent shall:

- (a) have regard to the MECP's guidelines in relation to the *Endangered Species Act, 2007*;
- (b) address the policy objectives contained in actions 2.7 and 4.1.4 of Ontario's Woodland Caribou Conservation Plan, 2009 (as updated); and
- (c) consider Biigtigong Nishnaabeg's caribou strategy in consultation with Biigtigong Nishnaabeg.

11. Atmospheric and Acoustic Environments

Atmospheric

11.1. The Proponent shall, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups, MECP and other relevant government agencies, develop an air quality monitoring and follow-up program to assist in determining the accuracy of the air quality modelling predictions in the Environmental Assessment and verify the effectiveness of air quality mitigation measures. The Proponent shall submit the air quality monitoring and follow-up program to the Technical Support Manager and District Manager, at least 90 Days following the commencement of the Construction Phase or by such date as may be specified in writing by the District Manager. The air

quality monitoring and follow-up program shall be developed to the satisfaction of the District Manager and shall include at a minimum:

- (a) updating of baseline conditions prior to the start of the Construction Phase or by such date as may be specified in writing by the District Manager, to inform the follow-up program by conducting:
 - i. sampling of benzo(a)pyrene, benzene, dustfall, and crystalline silica in the atmospheric local study area identified in Figure 2.4-3 of Appendix 6 of the Joint Review Panel Report, and updating the air quality model where parameters are higher than original assumptions; and
 - ii. analysis of the silt content of unpaved roads and updating of the air quality model should the value be higher than 5.8 percent;
 - (b) regular monitoring of the following during the Construction Phase, Operations Phase and Active Closure Phase: dust fall, total suspended particulate matter (TSP) and metals, crystalline silica, benzene, and benzo(a)pyrene;
 - (c) continuous monitoring of inhalable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}) and nitrogen dioxide (NO₂) during the Construction Phase, Operations Phase and Active Closure Phase;
 - (d) monitoring contaminants specified in clause (b) and clause (c) during the Construction Phase, Operations Phase and Active Closure Phase, where receptors are predicted to experience air quality exceedances for one or more contaminants and at locations used for traditional land resource use purposes, as determined in consultation with Indigenous Groups;
 - (e) implementing additional mitigation measures, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups, the MECP and other relevant government authorities and interested stakeholders, should monitoring show exceedances of any identified thresholds; and
 - (f) an adaptive management strategy.
- 11.2. The Proponent shall implement the air quality follow up and monitoring program specified in condition 11.1 and shall share the results of the program annually with Biigtigong Nishnaabeg, other Indigenous Groups, the MECP and Environment and Climate Change Canada.

Acoustic

- 11.3. The Proponent shall reduce noise-generating activities of the Project between the hours of 11 p.m. and 7 a.m. by:
- (a) not operating compactors on the southern portion of the process solids management facility during these hours during the Construction Phase and Operations Phase;

- (b) not operating bulldozers on the southern portion of the process solids management facility during these hours during the Operations Phase;
 - (c) not operating heavy equipment with an adjusted overall sound power level of greater than or equal to 110 dBA on the southern portion of the process solids management facility during these hours during the Operations Phase;
 - (d) ensuring that the frequency of haul trucks arriving in the southern portion of the process solids management facility does not exceed an average of four per hour; and
 - (e) requiring that all other heavy equipment in the southern portion of the process solids management facility idle while haul trucks are dumping mine rock in this area.
- 11.4. The Proponent shall acknowledge any noise complaint within 48 hours of receipt and implement corrective actions, if required, in a timely manner.
- 11.5. The Proponent shall develop a notification plan, in consultation with Biigtigong Nishnaabeg, other Indigenous Groups and the Town of Marathon, to provide advance notice to residents regarding noise generating activities from the Project, including blasting. The notification plan shall describe the methods and the timing of notifications. The Proponent shall implement the plan and provide a copy of any notifications to the District Manager.

12. Human Environment

Socio-Economic Environment

- 12.1. In addition to fulfilling all Commitments with regard to the development and implementation of policies, procedures and Indigenous cultural competency training that address violence, harassment and discrimination, the Proponent shall, in consultation with Biigtigong Nishnaabeg and other Indigenous Groups, develop a violence, harassment and discrimination follow up and monitoring program. This program shall include at a minimum:
- (a) documentation of all incidents of violence, harassment and discrimination associated with the Project;
 - (b) articulation of consequences enforced in response to violence, harassment and discrimination events;
 - (c) periodic assessment of the effectiveness of violence, harassment and discrimination policies, procedures and training as it pertains to incidents of violence, harassment and discrimination associated with the Project; and
 - (d) augmentation and adjustments to the policies, procedures, training and program in response to assessment results and consultation with Indigenous Groups.

- 12.2. The Proponent shall share with Biigtigong Nishnaabeg and other Indigenous Groups the results of the periodic assessments required by condition 12.1 (c) and any augmentation and adjustments to the policies, procedures, training and program referenced in condition 12.1 in response to the assessments.
- 12.3. In addition to fulfilling all Commitments with regard to the development and implementation of the Socio-Economic Follow-Up and Monitoring Program, the Proponent shall ensure that the Socio-Economic Follow-Up and Monitoring Program, in consultation with Biigtigong Nishnaabeg and other Indigenous Groups, includes monitoring the impacts of the Project on harvesters, including tracking the ability of harvesters to relocate and the level and change of harvesting near the Site.

Archaeology

- 12.4. The Proponent shall, prior to the Construction Phase and in consultation with Biigtigong Nishnaabeg and Pays Plat First Nation, complete an additional Stage 2 archaeological assessment should the final location of the discharge pipeline be in an area of archaeological potential on Hare Lake, as identified in Map 4 of the Supporting Information Document No. 27 of the environmental impact statement (Canadian Impact Assessment Registry Reference Number 54755, document number 227).
- 12.5. The Proponent shall develop, in consultation with Biigtigong Nishnaabeg and Pays Plat First Nation and the Ministry of Citizenship and Multiculturalism, and implement measures to mitigate adverse effects of the Project on any Cultural Heritage Resources identified through the Stage 2 archaeological assessment (and further stages, if recommended) referred to in condition 12.3.
- 12.6. Prior to the Construction Phase, the Proponent shall ensure that its General construction and operations management plan, as described in the Commitments, sets out a chance find protocol that includes at a minimum:
- (a) training for all employees engaged in activities that have the potential to discover Cultural Heritage Resources;
 - (b) a process to apply should previously undocumented archaeological resources or human remains be discovered, including:
 - i. immediately ceasing alteration of the Site;
 - ii. actions required to comply with any applicable requirements of the *Ontario Heritage Act* and the *Funeral, Burial and Cremation Services Act, 2002*;
 - iii. in situations where human remains are associated with archaeological resources, notification of the Ministry of Citizenship and Multiculturalism; and
 - (c) participation of Biigtigong Nishnaabeg and other Indigenous Groups as monitors.

Indigenous Monitors Program

12.7. The Proponent shall, prior to the Construction Phase and in consultation with Biigtigong Nishnaabeg and other Indigenous Groups, develop an Indigenous monitors plan to enable members of Biigtigong Nishnaabeg and other Indigenous Groups to participate as monitors the follow up and monitoring programs required by the conditions of this Approval and specified in the Commitments. The Plan shall include at a minimum:

- (a) a description of the scope, purpose, and objectives for the participation of Indigenous monitors in the follow up and monitoring programs;
- (b) a description of how each Indigenous monitor will be involved in the monitoring related to their area of interest, including the location, frequency, timing and duration of their participation;
- (c) if opportunities for Indigenous monitor participation in specific monitoring programs of interest to Indigenous Groups do not exist, provide an explanation why;
- (d) a description of how the Proponent will support the participation of Indigenous monitors, including through the provision of training, equipment and access to the Site; and
- (e) a process for providing Biigtigong Nishnaabeg and other Indigenous Groups an annual summary of the results of the follow up and monitoring programs outlined in conditions 9.7, 9.12, 9.18, 9.23, 9.26, 9.27, 10.9, and 12.3.

12.8. The Proponent shall implement the Indigenous monitors plan referenced in condition 12.7 and shall provide a copy of the plan and record of associated consultation to Biigtigong Nishnaabeg, other Indigenous Groups and the Director.

Dated the 29 day of November 2022 at TORONTO.

<Original signed by>

Minister of the Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3

Approved by O.C. No. 1578 / 2022

Date O.C. Approved 2022/11/30