

**Greenstone Gold Mines  
Compliance Monitoring Plan for the  
Hardrock Project**

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## 1. Introduction

Greenstone Gold Mines GP Inc. (GGM) proposes to construct, operate and ultimately decommission/close a new open pit gold mine, process plant, and associated ancillary facilities, collectively known as the Hardrock Project (the Project). The Project's environmental assessment (EA) was approved by the Ministry of the Environment, Conservation and Parks (MECP), as outlined in the Notice of Approval to Proceed with the Undertaking (Notice of Approval, dated March 12, 2019).

A Compliance Monitoring Plan was submitted to the MECP May 10 2019. Comments were received from MECP May 21 2019 and a follow up discussion was held June 12 2019. This document has been updated to address MECP comments.

## 2. Compliance Monitoring Program

The Compliance Monitoring Plan was developed for the Project based on Condition 4 of the Minister signed Notice of Approval to Proceed with Undertaking:

*4.1 The Proponent shall prepare and submit to the Director for approval an Environmental Assessment Compliance Monitoring Program.*

*4.2 The Environmental Assessment Compliance Monitoring Program shall be submitted to the Director within 60 days from the Date of Approval or such other time as agreed to in writing by the Director.*

*4.3 The Environmental Assessment Compliance Monitoring Program shall include a description of how the Proponent will:*

*a) Monitor the implementation of the Undertaking in accordance with the amended Environmental Assessment;*

*b) Monitor compliance of the commitments made during the environmental assessment process;*

*c) Monitor compliance of the commitments identified in the amended Environmental Assessment, including, but not limited to, those set forth in chapter 24 of the amended Environmental Assessment document;*

*d) Monitor compliance of the commitments made in the Proponent's responses to the comments received following the formal submission of the Environmental Assessment and the publication of the Ministry Review;*

e) *Monitor compliance with the design, construction, operation, closure and decommissioning of the Undertaking as set forth in the amended Environmental Assessment;*

f). *Monitor compliance of the monitoring, mitigation measures, consultation, additional studies and work as described in the amended Environmental Assessment; and,*

g) *Monitor compliance with the conditions set forth in this Notice of Approval*

4.4 *The Environmental Assessment Compliance Monitoring Program shall contain an implementation schedule for all monitoring activities that are to be completed.*

4.5 *The Director may require the Proponent to amend the Environmental Assessment 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 Environmental Assessment Compliance Monitoring Program to the Director within the time period specified by the Director.*

4.7 *The Proponent shall implement the Environmental Assessment Compliance Monitoring Program, and any subsequent amendments that may be required*

The Compliance Monitoring Plan describes the details of how GGM plans to monitor all commitments made throughout the entire Environmental Assessment process as well as Conditions set forth in the Notice of Approval.

It is understood that amendments to the compliance monitoring program may be required by the Director. A copy of the updated program will be submitted to the Director of the MECP within the prescribed timeline should revision(s) be required.

This compliance monitoring program is intended to monitor GGM's compliance with the EA provisions including:

- EA Mitigation, Commitments and Monitoring (Appendix A):
  - Atmospheric Environment, Acoustic Environment, Groundwater, Surface Water, Fish and Fish Habitat, Vegetation Communities, Wildlife and Wildlife Habitat, Labour and Economy, Community Services and Infrastructure, Land and Resource Use, Heritage Resources, Traditional Land and Resource Use, Spill Prevention and Response, Explosive Management, Consultation, Other
- EA conditions of approval (Appendix B).
  - Federal Conditions, Provincial Conditions

### 3. Monitoring and Fulfillment of EA

#### 3.1 Mitigation, Commitments and Conditions

The Final EA report (Chapter 24) contained a summary of mitigation, commitments and monitoring. GGM intends to fulfill these commitments, as summarized in Appendix A. Following receipt of the EA Notice of Approval Conditions GGM created a registry tabulating the requirements listed in the conditions of the Notice Approval, as summarized in Appendix B.

GGM has kept accurate records of all commitments made throughout the pre-construction phase via its commitment registry, grouping commitments by specific categories (such as atmospheric environment, consultation etc) for implementation. Prior to the Notice of Approval GGM recognized the need to implement a more robust mechanism to monitor commitment implementation and obligations made and track, with sufficient evidence how and where each of those commitments were being met over time. GGM decided to implement a Commitments Management Registry within its internal StakeTracker system specifically designed to satisfy the compliance monitoring requirements of the EA and future permit conditions, following the Project approvals.

Such a compliance monitoring program typically prescribes many hundreds of legally binding conditions that must be adhered to throughout the life of the Project, from pre-construction, through construction, operations, and finally decommissioning.

GGM will import and record all the mitigation, commitments and conditions (as summarized in Appendix A and B) into the Commitments Management Registry software, with reference to the source documents for these conditions, commitments, and agreements by uploading applicable documents into the application, or alternatively referencing them on the GGM's internal document management system (DMS).

The management of each individual condition and commitment are assigned to specific team members, with multiple tasks assigned to others ensure that each component of each condition will be actioned and met on time, through email notifications and escalations. The Commitments Management Registry software monitors any number of one-time, recurring and even 'perpetual' commitments, and sends out scheduled notifications well in advance of any commitments due dates and which have not been dealt with in the time allocated. Escalation notifications are also sent to those ultimately responsible for ensuring each condition is met by the due dates. This registry is used to house the raw data related to all commitment and conditions.

#### 3.2 Other Permits and Approvals

Many environmental approvals and permits are required to construct and operate the Project. Appendix A of the Sequencing Plan contains a summary of the environmental approvals required for the Project as currently known.

A list of Environmental Management and Monitoring Plans (EMMPS) that will be compiled for the Project are as follows:

- Construction Management and Monitoring Plan
- Compliance Monitoring Plan
- Sequencing Plan
- Historic Tailings Management and Relocation Plan
- Water Management and Monitoring Plan
- Biodiversity Monitoring and Management Plan
- Air Quality Monitoring and Management Plan
- Noise and Vibration Management Plan (includes blasting)
- Explosives Management Plan
- Spill Prevention and Response Plan
- Emergency Response Plan
- Soils Management Plan
- Erosion Sediment Control Plan
- Waste Rock Management Plan
- Waste Management Plan
- Aquatic Monitoring and Management Plan
- Archeology and Heritage Resource Management Plan
- Policy 2 Contaminant Monitoring Program - with reference to applicable EMMPS
- Multi-Media Monitoring Program - with reference to applicable EMMPS
- Mercury Monitoring and Management Plan Memo - with reference to applicable EMMPS
- Phosphorus Memo – confirming timeline for operation of Geraldton STP
- Sanitary Sewage Waste Management and Contingency Plan
- Compliant Protocol
- Community Relations Management Plan
- Health and Socio-Economic Conditions of Indigenous Peoples Plan
- Current Use of Lands and Resources for Traditional Purposes Plan

The above plans are being developed by GGM and will be provided to aboriginal communities for review and comment. Consultation will also occur with MECP as required.

GGM will continue to maintain its Record of Consultation (ROC), with applicable supporting records, throughout the life of the Project.

## 4. Implementation Schedule

The timeline and implementation phase (as presented in Appendix A and B) assume the following Project milestones

Project Phase	Start Date	Duration*
Pre-Construction (Detailed Engineering)**	Ongoing	Ongoing
Construction	2020	3 years
Operations	2023	15 years
Closure	2038	20 years

\*Durations are approximate and are for planning purposes. The timelines for closure activities will be based on monitoring results and direction from the Ministry of Energy, Northern Development and Mines (ENDM).

\*\* For additional information on permitting timelines and development of management and monitoring plans during the pre-construction phase refer to Appendix A of the Sequencing Plan.

The compliance monitoring program will be completed (including as amended) to meet the requirements of by the Director of the MECP.

The commitments and conditions registry will be updated on a regular basis and no less frequently than annually during construction, operation and closure (active rehabilitation) phases of the Project

## 5. Roles and Responsibilities

The Compliance Monitoring Plan is designed with protocols to escalate notifications to higher ranking company representatives within GGM to ensure commitments are being met by the timelines identified. Each Commitment or Condition will be assigned a specific start and completion date with specific tasks associated with each that will need to be completed in order to satisfy the Commitment or Condition. The escalation protocol within GGM is:

### **Commitment Owner – Environmental Supervisor**

An individual assigned by the Accountable Manager who is responsible for ensuring that the commitment is implemented/completed and that the associated tasks are completed. May be the 'Assigned by' and/or 'Escalate to' and/or 'Assigned to' team member in the commitment

### **Accountable Manager – GGM Environmental Superintendent**

An individual who holds the highest level of ownership for a Commitment and is accountable for its progress and completion. Accountable Managers would normally be responsible for determining Commitment owners. May be the 'Assigned by' and/or the 'Escalate to' team member in the Commitment

**Signing Authority – Director of Environment and Community Affairs**

An individual who has the authority to approve new commitments for entry into the Commitments register. The final level of escalation notification.

## 6. Documentation Requirements

Documentation requirements as set out in the EA conditions will be fulfilled, including the submission of required documents to MECP and other stakeholders as necessary.

A copy of the Commitments and Conditions Registry, as well as the Final EA Report will be maintained site office during the construction and operation phases of the Project. Post-decommissioning, copies of these documents will be maintained at the Corporate office.

A copy of any pertinent documentation will be made available to the MECP or designate upon request.

## 7. Reporting

GGM will prepare an Annual Compliance Report outlining the results of the Environmental Assessment Compliance Monitoring Program. The Compliance Report will be developed for the Project based on Condition 5 of the Minister signed Notice of Approval to Proceed with Undertaking:

*5.1 The Proponent shall prepare an Annual Compliance Report outlining the results of the Environmental Assessment Compliance Monitoring Program.*

*5.2 The first Compliance Report shall be submitted to the Director for review no later than 30 days following the one-year anniversary of the Date of Approval and shall outline the results of the Environmental Assessment Compliance Monitoring Program for the period of one year from the Date of Approval*

*5.3 Each subsequent Annual Compliance Report shall be submitted no later than one year following the submission of the previous Annual Compliance Report and shall outline the results of the Environmental Assessment Compliance Monitoring Program following the submission of the previous Annual Compliance Report.*

*5.4 The Proponent shall continue to submit an Annual Compliance Report each year following the Date of Approval until all the conditions in this Notice of Approval are satisfied or until such time as the Director determines that the proponent is no longer required to do so. The Director shall notify the Proponent in writing should the Director determine that the Proponent is no longer required to submit an Annual Compliance Report*

*5.5 Once all conditions of this Notice of Approval have been satisfied, the Proponent shall notify the Director in writing that the final Annual Compliance report is being submitted, and that all conditions in this Notice of Approval have been satisfied.*

*The Ministry will confirm whether all conditions have been satisfied and the Director will state 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 Ministry until such time as the Director determines that the Proponent is no longer required to do so. The Director shall notify the Proponent in writing should the Director determine that the Proponent is no longer required to retain copies of the Annual Compliance Reports that have been submitted.*

5.7 *The Proponent shall make each Annual Compliance Report that has been submitted to the Director, and any associated documentation, available to any Ministry designate in a timely manner when requested to do so.*

The first Compliance Report will be submitted April 23 2020, with annual reports due April 23 each year. The reports will be submitted to the Director of the Environmental Approvals Branch for the public record and Ministry review.

The compliance report will include the following topics and including others as deemed appropriate during report preparation:

- Introduction;
- Project Overview and Update
- Regulatory Overview and Update
- Community Specific Consultation Update
- Compliance Monitoring Results (tables) including:
  - Mitigation Measures/Commitments
  - Monitoring
  - Conditions

Appendix C contains draft tracking tables, to be used in the annual Compliance Reports, subject to revision during document preparation as needed to better present the information available

GGM will continue to engage with its Indigenous partners and will communicate the results of the Compliance Monitoring Plan through the Environmental Advisory Committee's already in place. The Community Specific Consultation Update provided in the Annual Report will also address subcomponents (a through j) of Conditions 8.3 as appropriate.