

# Hardrock Project

## Site Emergency Response Plan

HP-GGM-HS-007-0006

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Table of Contents

1	Purpose and Scope .....	4
2	Definitions .....	4
3	Roles and Responsibilities .....	5
4	Introduction.....	6
	4.1 Location.....	7
	4.2 Muster Points .....	7
5	Early Works Measures.....	8
6	Emergency Response Team.....	8
	6.1 Team Organization .....	8
	6.2 Emergency Contact Information .....	9
7	Emergency Response Procedures .....	11
	7.1 Evacuation Protocol .....	11
	7.1.1 Building Evacuation .....	12
	7.2 Medical Emergency.....	12
	7.3 Fire and/or Smoke.....	13
	7.4 Confined Space or High Angle Rescue.....	14
	7.5 Crane Collapse.....	14
	7.6 Spills .....	14
	7.7 Structural Failures (Mine Infrastructure).....	15
	7.7.1 TMF Dam Failure .....	15
	7.7.2 WRSA or Overburden Storage Area Slope Failure.....	15
	7.7.3 Loss of Stability of Historical MacLeod Tailings.....	16
	7.7.4 Goldfield Creek Diversion or Water Crossing Failure .....	16
	7.8 Traffic Incidents.....	17
	7.9 Extended Power Loss .....	17
	7.10 Severe Weather .....	18

7.11	Wildlife Encounters.....	18
7.12	Missing Persons.....	19
7.13	Communication Lockout.....	19
7.14	Chemical and Biological Emergency.....	20
7.15	Process Plant – Mill Alarms.....	20
7.16	Civil Unrest.....	20
7.17	Resumption of Work (All Clear).....	20
8	External Communications.....	21
9	Personnel Training.....	21
10	Reporting, Audit & Validation Requirements.....	22
11	Document Control.....	23
12	Training.....	23
13	Emergency Simulations.....	24
14	Review.....	24
15	Reference Documents.....	24
16	APPENDIX A – Mine Site Layout with Muster Points.....	25

## 1 Purpose and Scope

The purpose of this document is to outline the necessary procedures and communications to enact a response to any emergency by GGM for the Hardrock Project. This document is for construction and will be updated prior to pre-commissioning.

This ERP, as well as the Spills Prevention and Contingency Plan, and the Communications Plan address Conditions 9.1-9.5 of the Decision Statement issued by the Federal Minister of the Environment and Climate Change.

This procedure applies to all GGM employees, contractors, sub-contractors and suppliers working on the Hardrock Project site in the execution of their roles on the Project. Contractors who are conducting work on the Project without direct GGM supervision must also maintain an ERP, which must be aligned with this plan.

## 2 Definitions

Term	Definition
Crisis	A serious, present or potential event that causes harm to personnel, the environment or assets of GGM and may pose an actual or potential threat to the long-term ability to do business due to the impact on the operation, image or liability of GGM.
Emergency	A situation or an impending situation that constitutes a danger of major proportions that could result in serious harm to persons or substantial damage to property and that is caused by the forces of nature, a disease or other health risk, an accident or an act whether intentional or otherwise (Emergency Management Act, R.S.O. 1990, c. E.9).
Emergency Response Team	A group of individuals who are trained and equipped to respond to an emergency.
Medical Responder	Leads and administers medical response to both serious and non-serious medical emergencies.
Critical Injury (Occupational Health and Safety Act Reg. 834)	<p>An injury of a serious nature that:</p> <ul style="list-style-type: none"> <li>• Places life in jeopardy</li> <li>• Produces unconsciousness</li> <li>• Results in substantial loss of blood</li> <li>• Involves the fracture of a leg or arm, including a wrist, hand, ankle, foot or multiple fingers or toes</li> <li>• Consists of burns to a major portion of the body</li> <li>• Causes the loss of sight in an eye</li> <li>• Involves the amputation of a leg, arm, hand or foot or multiple fingers or toes</li> </ul> <p>For the purposes of this procedure, a Critical Injury is a Significant Incident, but not necessarily vice versa. The term Critical Injury will only be used in reporting to Ministry of Labour.</p>
ERT Staging Area	Numbered designated area where emergency personnel meet in the event that assistance is required from the emergency response team.

Term	Definition
Muster Point	Lettered designated safe areas for workers to gather in the event of an emergency.
Safety Data Sheets (SDS)	A form that contains detailed information about the possible health and safety hazards of a product and how to safely store, use and handle the product.
Serious Incident	Any incident that would have caused a critical injury but for safety precautions, rescue measures or chance.
Severe Weather	Weather events such as heavy snowfalls, freezing rain, severe thunderstorms or tornadoes that can cause loss of life, injury and damage to property and businesses.
Spill	A discharge into the natural environment from or out of a structure, vehicle or other container.

Note: The full list of Project definitions is found in HP-GGM-PM-002-0004\_Project Glossary.

### 3 Roles and Responsibilities

Title/Role	Responsibility/Accountability
Project Director	<ul style="list-style-type: none"> <li>Provide support to the ERC and all personnel during an emergency. Ensure ERP is well established and known to all personnel at site. Make sure sufficient trained resources are assigned to the ERT. Make sure public communications are coordinated and executed properly.</li> </ul>
Emergency Response Commander (ERC)	<p>The individual responsible for the management of the incident and the coordination of the emergency response. The Emergency Response Commander (ERC) will:</p> <ul style="list-style-type: none"> <li>Coordinate response activities and communicate instructions to the Emergency Team</li> <li>Coordinate/collaborate with external agencies and authorities, public officials and emergency services.</li> <li>Be responsible for all crisis communications including to the GGM senior management team.</li> <li>In collaboration with the Contractor Supervisor/HS coordinators, and Environmental Superintendent provide support for incident investigation/reporting.</li> <li>Confirm all required notices to the OSHA Operations Division are made in accordance with the OSHA standards.</li> <li>The Commander will ultimately determine if temporary shut-down is required as a result of an emergency, and, in consultation with the ERT, determine when work may safely resume</li> </ul>
Security	<ul style="list-style-type: none"> <li>Responsible for answering emergency phone calls during work hours, weekday evenings, weekends and holidays.</li> </ul>
Environment Superintendent	<ul style="list-style-type: none"> <li>Provide support to Emergency Response Team</li> <li>Communications to Indigenous partners in conjunction with Community Relations team as per Environmental Assessment commitments.</li> </ul>

Title/Role	Responsibility/Accountability
	<ul style="list-style-type: none"> <li>• Provide support for incident investigation/reporting.</li> </ul>
HS Manager	<ul style="list-style-type: none"> <li>• Provide support for the ERT</li> <li>• Provide support for incident investigation/reporting</li> </ul>
Supervisors	<ul style="list-style-type: none"> <li>• Follow the emergency response procedures</li> <li>• Conduct an incident investigation in coordination with relevant HS personnel and submit a report.</li> </ul>
Workers	<ul style="list-style-type: none"> <li>• Notify their supervisor immediately when an emergency situation arises, or if not available, follows the Supervisor’s procedure for raising an alarm.</li> <li>• Follow emergency response procedures</li> </ul>

## 4 Introduction

GGM is committed to protecting the health, safety and wellbeing of all staff, contractors, public, and the natural environment as part of its work. GGM will ensure all staff and contractors are familiar with the ERP and emergency response procedures that are relevant to their responsibilities on site.

During an emergency, the Project site may experience the following:

- Injury or death to employees, site visitors, the public and/or those nearby;
- Environmental damage;
- Damage or loss to company property, assets, and/or reputation; and,
- Delay in a return to normal operations.

The following plans and procedures developed for construction phase of the Project refer contain references to emergency procures:

- Health and Safety Manual
  - Extreme Weather
  - Incident Reporting
  - Fire Protection and Prevention (under development)
  - Traffic Management Procedure
  - Working Alone (Missing Persons)
- Construction Environmental Management Plan
  - Wildlife Encounters
  - Spills
- Security Management Plan (under development)
  - Civil Unrest
  - Communication Failure

Prior to a formal Construction Decision, GGM will commence and Early Works program that will focus on a limited set of activities. Emergency response procedures specific to this phase are outlined in the Early Work section. Response measure will then be transitioned to the full range as described in this document once Construction commences.

The following potential emergency situations have been identified as requiring comprehensive procedures or response plans that will be prepared as the Project progresses:

- Chemical and Biological Emergencies
- Mine Infrastructure (TMF, Open Pit) Failures
- Natural Disaster
- Process Facility Alarms

#### 4.1 Location

The Hardrock Project is located at 8000 Highway 11 in the Municipality of Greenstone. It can be accessed off Highway 11 along the main access road. The Project is located approximately 4 kilometers south of Geraldton, Ontario as shown in Figure 1.



*Figure 1: Hardrock Project Location*

#### 4.2 Muster Points

Muster points are identified by signage posted in the area either with a portable sign or signage attached to a construction trailer. Each muster point must have an alternative location in the event there is a danger associated with designated ones.

Each ERT Staging Area has a reference number associated with the site location and is logged with GGM Emergency Response Team. Each ERT Staging Area must have an alternative location in the event there is a danger associated with designated ones.

Appendix A provides a more detailed map showing the mine site layout with the locations of muster points, evacuation routes and first aid stations. Once constructed, the First Aid room will be located in the Site Administration Building. A trailer will be provided in the interim.

## 5 Early Works Measures

The following will be implemented to cover the limited activities that are planned prior to a formal construction decision.

Communications will be undertaken using the Contractor's radios until such time as a site radio communication system is implemented. For work areas near the highway, cell phone coverage will be available. For areas of poor cell phone coverage, the InReach system will be used.

Daily safety meeting will be held. This location will be considered the muster point for any emergencies.

For serious medical emergency, 911 will be called. An injured worker will be taken to the nearest roadway to meet the ambulance using the Contractor's protocols.

The following First Aid measures will be in place as per Ontario requirements – stretcher, blankets, St John's First Aid Manual, a First Aid station and First Aid kit.

## 6 Emergency Response Team

### 6.1 Team Organization

The Emergency Response Team will be made up of GGM and Contractor personnel (as applicable) and will be responsible for managing emergency situations. The team is lead by the Emergency Response Commander (ERC).

The Emergency Response Commander, or designate, will assume responsibility for each incident in consultation with senior management, the ERT and relevant government agencies. The ERC is the primary decision maker for assessing and responding to incidents at the Project site.

Members of the ERT may undertake the following:

- Secure the incident area and control the access by establishing a safety perimeter.
- Designate persons to guide ambulance personnel to incident site.



- Receive external resources (ambulance, fire department, etc.) at the incident scene and provide necessary support and information.
- Ensure potential hazards are addressed to prevent a recurrence of accident, if safe to do so.
- Ensures everyone is accounted for and safe.
- Ensures that written records of all activities are kept including the maintenance of the Emergency Response Activities Log.

GGM will ensure that sufficiently trained emergency response personnel are on site at all times.

## 6.2 Emergency Contact Information

Contact information for external authorities are listed in Table 1.

*Table 1: Emergency Contact Numbers*

Department	Contact Number	Location
GGM Emergency On-call number	Pending	Site
Early Works Interim Emergency Number (HS Manager)	1-780-838-3967	Geraldton
Geraldton Fire Department – 301 East Street Geraldton Ontario	1-807-854-0212	Geraldton
Geraldton Ambulance – 815 Main Street Geraldton Ontario	1-807-854-2204	Geraldton
Ontario Provincial Police (OPP) – 8054 Highway #11 Geraldton Ontario	1-807-854-1333 - noncritical	Geraldton
Forest Fire Ontario – Ministry of Natural Resources	1-888-284-3473	-
Ontario Ministry of Natural Resource – Geraldton Fire Station	1-807-854-0558	Geraldton
Ministry of Environment Conservation & Parks – Spills Action Centre	1-800-268-6060	Toronto
Greenstone Family Health Care	1-807-854-0051	Geraldton
Ontario Poison Center	1-800-268-9017	-
Ministry of Environment Conservation & Parks – Thunder Bay Ontario	1-807-475-1205	Thunder Bay
Ontario Ministry of Labour	Day: 1-800-465-5016 Evening:1-800-268-6060	Toronto
Hydro One	1-807-434-1235	-
Union Gas	1-877-969-0999	-
TransCanada Pipeline Emergency	1-888-982-7222	-
Transport Canada	1-888-226-8832	-

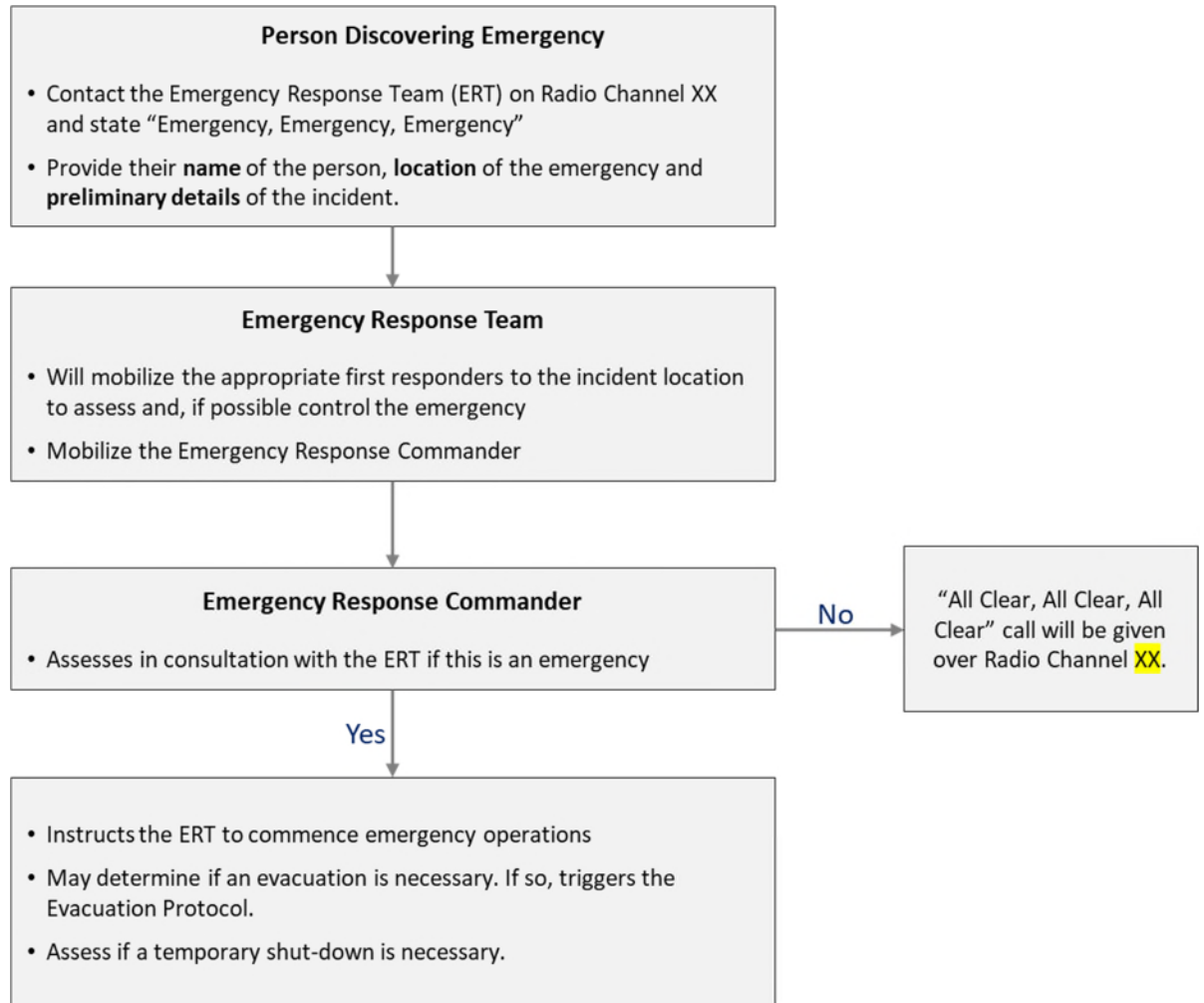
For environmental incidents, the Environmental Superintendent will contact the Indigenous partners as per the terms of the Federal Environmental Assessment Decision Statement – Condition 9.4.1. Contact information for local Indigenous partners, which may need to be contacted are listed in Table 2.

*Table 2: Indigenous Partners’ Emergency Contact Numbers*

Indigenous Community	Contact Number	Email
AFN – Chief Dorothy Towedo	807-329-5970	chiefdorothytowedo@gmail.com
AZA – Chief Theresa Nelson	807-875-2785	tnelson@aza.ca
GFN – Deputy Chief Maurice Waboose	807-876-2242	maurice.waboose@ginoogamingfn.ca
LLFN –Chief Veronica Waboose	807-876-2292	veronica.waboose@longlake58fn.ca
MNO - Linda Norheim, Director Lands Resources and Consultations	416-433-1315	LindaN@metisnation.org
RSMIN – Chief Troy DeLaRonde	807-623-4635	troy@rsmin.ca

## 7 Emergency Response Procedures

In the event of an Emergency the following steps will be followed:



### 7.1 Evacuation Protocol

- The air horn shall be sounded – one long blast - in the vicinity of the emergency to notify nearby personnel to assemble at the muster points.
- Air horns will be located throughout the Project site during construction until permanent alarms are installed.
- The ERC will announce on Radio Channel XX for the personnel in the affected vicinity to stop working and evacuate and to assemble at the nearest muster point;
- The Supervisor or if the supervisor is attending the incident, the HS Manager or designate, will conduct a headcount and report the count to the ERT on Radio Channel XX, stating clearly that either all personnel are accounted for, or that there are personnel not accounted for.

- The ERC will follow-up with all contractors via telephone, radio or other means of communication to ensure all employees have been notified and have gone to their respective muster point.

During an emergency, phone and radio use must be limited to the emergency, to ensure that all workers are aware of the alarm and evacuate as required.

The ERC/ERT first responders evaluate the situation and identify any further hazards that could arise. If further hazards arise, the ERC shall direct resources to manage those hazards.

If there is an evacuation from site, and more than one vehicle is used, each vehicle must stay in sight of each other, if possible. The meeting place after leaving the scene is the parking lot of the Temporary Camp.

### 7.1.1 Building Evacuation

In situations where it is necessary to evacuate a building, the following procedures should be followed by all personnel within the structure. Visitors within a building under this situation will be escorted by GGM personnel.

- An evacuation alarm will be a long air horn blast and/or announced over Radio Channel XX.
- Stop work and exit the building at the nearest designated exit IMMEDIATELY when an alarm sounds or when instructed to do so. Do NOT delay your exit from the building by searching for belongings or other people;
- Continue to the designated Muster Points (Appendix A) for a headcount;
- Follow instructions, avoid panic and cooperate with the Emergency Response Team;
- Do not obstruct fire hydrants, fire routes or the responding fire/rescue teams and their equipment; and,
- Do not re-enter the building unless instructed to do by the ERC (or designated emergency officer/wardens) through the "ALL CLEAR" command.

The officer/warden(s) will be responsible for ensuring the evacuation takes place in an orderly fashion and will search the building for any people remaining, close doors (to create fire barriers) and ensure all personnel have evacuated.

## 7.2 Medical Emergency

In the case of an emergency where a person requires first aid or medical aid, immediately inform a Supervisor or Security. The following information should be provided:

- Nature of the medical emergency;
- Location of the emergency;
- Your name and the phone number from which you are calling from; and,

While waiting for help to arrive:

- Assess the situation to ensure that there is no danger prior to responding to the emergency.
- Do not move the injured person unless absolutely necessary to avoid further injuring the person.
- Locate personnel nearby that are trained in CPR and first aid to provide the required assistance prior to the arrival of professional medical help. A current list of first aid providers is posted at the First Aid Station, along with First Aid kits and AED locations.
- If trained personnel are not available, as a minimum, attempt to provide the following assistance:
  - Stop bleeding with firm pressure on the wound (Note: use gloves to avoid contact with blood or other bodily fluids – they can be found in the first aid kits); and,
  - Clear air passages using an appropriate method or, in the case of obstruction of the airway by a foreign object, use abdominal thrusting (Heimlich maneuver).

In case of assisting personnel exposed to hazardous material, consult the Safety Data sheet (SDS) and wear the appropriate protective equipment. Attempt First Aid ONLY if trained and qualified.

Security will inform the ERT and the medic. The ERT or medic will determine if 911 must be called.

### 7.3 Fire and/or Smoke

Any configuration of combustible materials at the Project site causing danger of burns or suffocation/choking from smoke inhalation is considered an emergency. This can also include fires from nearby sites adjacent to the Project site where there is a clear danger of the fire spreading or the inundation of the area with smoke.

When a fire is discovered:

- Activate the fire alarm
- Notify the local a Supervisor or a member of the ERT. The ERC will call 911.
- Notify site personnel about the fire emergency by the following means:
  - Voice communication
  - Vehicle horn - three (3) long 3 second honks
- Contain the fire only if it is safe to do so. Close all doors and windows near the fire. Shut off fans, ventilators and air conditioners; and,

Fight the fire ONLY if:

- The alarm has been raised with the ERT
- The fire is small and not spreading to other areas

- Escaping the area is possible by backing up to the nearest exit (i.e. the fire does not impede access to the fire exit)
- The fire extinguisher is in working condition and personnel are trained on use.

If the fire cannot be extinguished, evacuate the building/area immediately.

Additional details are available in the **Fire Prevention and Protection Procedure**

#### 7.4 Confined Space or High Angle Rescue

Once construction commences, GGM will assemble a team of trained Emergency Responders capable of managing and executing a high angle and confined space rescue. It is expected that the majority of team will be comprised of members of the speciality contractors' workforces.

The emergency responders shall have the appropriate equipment to conduct a rescue (ropes/straps, pulleys, attachments, basket, fall protection devices, etc.). GGM will identify and maintain a log of trained emergency responders.

#### 7.5 Crane Collapse

In the unlikely event of a crane accident, the scene will be immediately assessed to see if there are any injuries, trapped persons or fatalities. ERT shall be notified immediately.

Prior to anyone approaching the scene, it must be determined if any equipment or structures are unstable to ensure rescue personnel are not put at risk. Any known dangers and hazards, including unstable structures, must be identified to rescue personnel and First Responders upon their arrival.

The area will be barricaded in red to prevent any non-essential persons from entering. This also serves to preserve the site for investigation later. The ERT is in charge of the scene until all injured are cared for and the site is deemed safe. At this stage, the investigation can commence and the insurance carrier contacted.

Once the investigation is completed, the crane can then be removed from site under the guidance of a registered Professional Engineer or equivalent specialist. The engineer will calculate the center of gravity for the crane as it is lifted and design the complex rigging applications required for handling bent and broken components.

#### 7.6 Spills

Refer to the **Spills Prevention and Contingency Plan** which outlines a plan of action for reasonably foreseeable spill events. The Plan defines the responsibilities of key response personnel and

outlines the procedures for responding to spills in a way that will minimize potential health and safety hazards, environmental damage and remediation costs.

## 7.7 Structural Failures (Mine Infrastructure)

Facilities (seepage collection ponds, TMF) will have an Operation, Maintenance and Surveillance (OMS) Manual which will outline how each facility is operated, maintained, and inspected by mine staff/contractors. Potential failure modes are listed along with inspection guidelines and normal instrumentation responses. Each OMS Manual will be based on specific engineering design limitations and have detailed instructions on operations and inspection complete with “triggers” to indicate areas or situations which may be outside normal operating conditions.

Each OMS Manual will contain instruction on how “triggers” are escalated, and when an Emergency should be declared. In the event of a “trigger” situation, the supervisor/operator/inspector as defined in the OMS Manual will notify their immediate supervisor and inform the ERC of the situation and the proposed course of action. If the situation is escalated to a declared emergency, the ERC shall assume control of the situation and the elements of the ERP shall apply with respect to response, communication, notification etc.

### 7.7.1 TMF Dam Failure

Under normal design conditions there will be no releases to the environment directly from the TMF as the TMF water is recycled back to the mill for use in processing. In the event of precipitation above the 1:100-year storm design event, an emergency spillway will pass the excess flow to maintain dam stability.

The initial response in the event of a TMF dam failure will include:

- Shut down pumping of tailings to the TMF.
- Notification of authorities, emergency responders, local residents and local Indigenous communities.
- Initiate pumping of tailings water to the open pit if needed.
- Deploy turbidity curtains within affected watercourses.
- Deploy earthwork equipment to repair the dam and establish additional containment as needed
- Develop a remedial action and monitoring plan specific to the event.

### 7.7.2 WRSA or Overburden Storage Area Slope Failure

Failure of the Waste Rock Storage Areas (WRSA) and overburden storage areas could occur as a result of inadequate consolidation or soil shear strength, incorrect stockpile placement or grading, uncontrolled erosion, inappropriate design considerations, improper geotechnical monitoring

and/or unknown soil/foundation characterization. Emergency preparedness measures will include maintaining access, setbacks and ongoing monitoring and inspection with thresholds to indicate exceedances of design criteria and potential failure.

If a WRSA were to fail, the first response will be to stop work in the area and clear the area to maintain worker safety. A specific response plan would be developed and when safe to do so, material could be returned to the storage area, or recontoured in place depending upon the scale of the failure. Measures to reduce the extent of the released material may also be needed including silt fencing and berms to limit further movement/release of material. Areas would be restored to the extent practical and a monitoring program will be designed to monitor the success of rehabilitation measures.

### 7.7.3 Loss of Stability of Historical MacLeod Tailings

The historical MacLeod tailings deposits are comprised of loose sand and silt, which provides less stable geotechnical conditions than native soils in the area. Project development will include the construction of Highway 11 and the placement of overburden material over the historical MacLeod high tailings and as a result the potential for failure from these activities exists without further design and mitigation.

The first response would be to stop work in the area and clear and secure the area to maintain worker and public safety. Notification of authorities, emergency responders, local residents and Indigenous communities would occur if required. The historical MacLeod tailings would be contained to the extent possible using temporary dams of earth or snow and silt fences, and through other available equipment or means. Remediation and monitoring of tailing-impacted areas would be implemented, and the basic causes of the failure would be investigated to inform the development and implementation of measures to reduce the possibility of recurrence.

If a storage area were to fail as a result of the historical MacLeod tailings failure, material would either be excavated if safe to do so and returned to an appropriate overburden storage area with remediation if required, or be recontoured in place.

### 7.7.4 Goldfield Creek Diversion or Water Crossing Failure

The Goldfield Creek diversion will involve excavation and clearing along new and existing channels, and will be susceptible to erosion during construction before the channel is stabilized. The diversion will connect with the existing Southwest Arm Tributary, potentially resulting in downstream effects to that watercourse as well. Failure of the diversion channel or related works could result from a precipitation or snowmelt event that exceeds the design capacity, causing the loss of channel form due to erosion, or damage to watercourse crossings downstream of the diversion along the Southwest Arm Tributary and potentially the Southwest Arm of Kenogamisis Lake.



The diversion channel will be monitored on a regular basis and adaptive management will support long-term stabilization. If a breach occurs repairs will occur when it is safe to do so. In the event that a structural failure occurred and habitat was permanently damaged, additional offsetting measures may be required in accordance with relevant legislation.

## 7.8 Traffic Incidents

The Project site includes a 2.5 km long access road and numerous haul roads throughout the mine site. To reduce the likelihood of an incident, all traffic associated with the Hardrock Project will be managed in accordance with the **Traffic Management Procedure**. All roadways will be constructed with safety in mind and will be well maintained. Communications will be available along all roads.

In the case of a collision, anyone involved should first check themselves for injury. If anyone is seriously injured, they should try not to move, and wait for emergency personnel. If possible, everyone should move to the side of the road. If the vehicle is safe to drive and is causing a hazard where it is, pull it to a safer location. Otherwise, leave it where it is. The first person able to do so, whether involved in the collision or an observer, should call the Emergency Support Manager to confirm next steps.

## 7.9 Extended Power Loss

In the event of an unscheduled power outage and if the power outage occurs for longer than 2 hours, it may be considered an extended power loss. While not always an emergency, it is at the discretion of the ERC to determine the severity of the situation.

In the event of an extended power loss, certain precautionary measures should be taken depending on the site location and the environment of the facility:

- Unnecessary electrical equipment and appliances should be tuned off in the event that power restoration would surge, potentially causing damage to sensitive equipment;
- Facilities exposed to freezing temperatures should have any power turned off and the following drained in the event of a long-term loss of power (these procedures will be coordinated by the ERC):
  - Fire sprinkler systems;
  - Standpipes;
  - Potable water lines; and
  - Toilets.
- Add propylene-glycol to the lines to prevent traps from freezing; and,
- Equipment that contains fluids that may freeze due to long term exposure to freezing temperatures should be moved to heated areas, drained of liquids susceptible to freezing or provided with auxiliary heating sources for protection.

Upon restoration of heat and power:

- Electronic equipment should be brought up to ambient temperature before energizing to prevent potential condensation buildup on internal circuitry; and,
- Fire and potable water piping should be checked for cracks and leaks due to freezing after heat has been restored to the facility and water service restored.

## 7.10 Severe Weather

Severe Weather announcements will inform all employees and visitors to the site of any serious weather conditions. Personnel observing any approaching severe weather shall advise a Supervisor through the use of a radio broadcast or similar. Supervisors will be expected to inform their teams as necessary and account for their whereabouts.

Safe work practices in the case of severe weather are outlined in the **Severe Weather Procedure**.

In the event of a Severe Weather announcement:

- Supervisors are to account for all employees and visitors, ensuring everyone is accounted for.
- Personnel are to seek shelter and protect themselves.
- Stay calm and encourage others to remain calm.
- Listen to all weather reports for updates. Do not leave the enclosed room until the weather warning has been lifted.

Emergency equipment and supplies shall be available or readily obtained. The ERT or designate will be responsible for ensuring the supply kits are stocked with supplies for 72 hours. Items may include but not be limited to water, non-perishable food, battery powered/hand cranked radio, flashlights, batteries, whistles, dust masks, can openers, blankets, candles and matches.

## 7.11 Wildlife Encounters

The Hardrock Project is located in an area typical of wildlife which may affect personnel safety and/or access. Refer to the Biodiversity Management and Monitoring Plan for reporting wildlife encounters and observations. Project personnel and contractors will be encouraged to report sightings of wildlife on and around the Project, in particular, discovery of occupied habitat features (e.g., active dens, beaver dams).

All bear observations and encounters will be reported to the Environmental Department.

Bear deterrent (e.g. bear spray and bear bangers) will only be made available to staff and contractors working on site if observations continually increase and there is a likelihood of an

observation escalating to an encounter. Only persons trained in the proper use of the deterrent shall be issued equipment.

## 7.12 Missing Persons

While on site, supervisors are required to carry a communication device (cell phones, radios or possibly InReach satellite communication devices for remote locations). Personnel working alone are required to check-in at least every two hours during the day. If a check in has been missed, it may be deemed a missing person.

The following steps are to be taken if the whereabouts of an employee or visitor (identified in the Visitors Log) cannot be accounted for during an emergency:

- Initial search shall be coordinated by the ERC.
- Employees will be directed by the ERC or designate to systematically search the premises, within structures/buildings (if it is safe to do so).
- Should a search of the site be unsuccessful, the ERC or designate, shall notify the local law enforcement by calling 911 and give a description of the missing person and/or photograph, if available.
- The authorities will assume control of the search from this point. Formal Search and Rescue operations will be under the control of Provincial Authorities, (i.e. Ontario Provincial Police, Ministry of Natural Resources or other).
- The family and/or next of kin of the missing person shall also be notified by local authorities, and/or by GGM Project Director or designate after consultation with the local authorities to explain what is being done to find the missing person and that the local authorities have been contacted.

All previously contacted persons and law enforcement must be notified, should the missing person turn up, whether a result of the search or of their own accord.

## 7.13 Communication Lockout

In the event of a site crisis requiring communication limitations, the following actions will be taken to restrict all non-critical communications:

- Internet communications will be limited to Emergency Response Team members and designated to avoid system overload.
- Company radio use onsite will be limited to emergency related messages only, radios are to remain in the ON position, and personnel are to monitor transmissions for emergency instruction.

## 7.14 Chemical and Biological Emergency

A detailed procedure will be developed as the project progress once chemicals are on site.

## 7.15 Process Plant – Mill Alarms

Process Plant Mill Alarms may be activated for a number of emergency situations, such as fire and smoke, uncontrolled release of fuel, lubricants, process and other chemicals, personnel emergency (injury), and structural failure. Emergency procedures as outlined in this ERP will be followed in conjunction with operational requirements as outlined in the Process Plant Operations, Maintenance and Surveillance (OMS) Manual under the direction of the ERC or designated.

## 7.16 Civil Unrest

Civil unrest may include:

- Bomb threats – all bomb threats should be taken seriously. If a threat is received by telephone it is important to get as much information as possible from the caller (note the time of call, exact words of caller, details during or immediately after the conversation (such as gender, accent, attitude, background noises and motive). After the call notify the immediate supervisor to initiate the response (do not discuss the call with anyone who does not have immediate need to know the information).
- Active shooters – In the event of an active shooter the ERC will advise the appropriate course of action which will be to evacuate or seek cover or other measures appropriate to the situation.
- Intruder response (non-activist). A non-activist is considered as trespassing. A trespasser may attempt theft or vandalization. The trespassers should be immediately notified by security that they are trespassing and failure to immediately depart will result in notification of law enforcement. Continued observation will occur until law enforcement arrives.
- Intruder response (activist): An activist is considered to be an intruder whose actions aim to disrupt normal operations of the site for demonstration or protest purposes. Based on the incident facts the ERC will determine whether contact with local law enforcement is necessary and any other security actions required.

## 7.17 Resumption of Work (All Clear)

Areas or buildings directly affected by an emergency situation which required evacuation, shutdown, work stoppage etc. shall not be reoccupied-entered without the declaration of “ALL CLEAR” as directed by the ERC (or designated person).

In instances where buildings-structures have been affected by fire, or other structural failure and have not be deemed “SAFE” and the area will remain “Locked Out” until all investigations, inspections and or repairs have been completed and certified by licensed professionals.

## 8 External Communications

It is important that communications to the media during an emergency are well planned. The process for communication, including communications with Indigenous groups, is included in the Communications Plan. Information to be included in the notification is outlined in Condition 9.4.1 of the Decision Statement issued by the federal Minister of the Environment and Climate Change.

Crisis communication includes the management of communications to:

- The Media
- Government Authorities
- Emergency Services
- Local community
- GGM Senior Management
- Corporate Legal and Insurance

Only corporate personnel will provide information regarding the emergency to the media. The Emergency Response Commander will coordinate communications, through the Community Relations Manager, with government authorities and neighbours. The ERC will provide details of the emergency to the attending Emergency Services and Senior Management.

All other personnel, including contractors and visitors, will not respond to media questions about any emergency. Enquiries shall be directed to the ERC. No media vehicles will be permitted on site without permission of the ERC.

In the case where it is compulsory to advise government authorities (e.g. Ministry of Labour, Ministry of Environment, Conservation & Parks, Ministry of Natural Resources and Forestry etc.), the ERC, or designate, in coordination with the GGM HS Manager and GGM Environment Superintendent, will ensure that these communications are made. If representatives from statutory authorities must be provided access to the site and it is safe to do so, they should be escorted as directed by the ERC.

## 9 Personnel Training

GGM will ensure that its staff and contractors have basic emergency training as appropriate, such as standard first aid and Globally Harmonized System (GHS) / Workplace Hazardous Materials Information System (WHIMS 2015) and are aware of GGM health and safety policies and procedures.

Members of the Emergency Response Team require more vigorous and continual training. This training will focus on specific elements of the Project site and will include, but not be limited to:

- Advanced First Aid and CPR
- Surface Mine Rescue
- Fire Response
- Spill Response
- Hazardous Material Handling

Routine practice drills will occur to maintain Emergency Response Team member skills and to test-validate the ERP system and processes.

## 10 Reporting, Audit & Validation Requirements

Immediately after the emergency is over, the ERC, or designate, will arrange for an investigation with the appropriate investigation team members (i.e. Joint Health & Safety Committee, etc.). The investigation will include a detailed review of the sequence of events and communications and actions taken immediately prior to, during and after the emergency situation. This work will be done in alignment with the **GGM Incident Reporting Procedure**.

Where available, instrument readings, plant logs, sign in registers and other relevant documents, will be examined carefully and retained. In most cases, photographs taken immediately after the emergency will be of value to the investigation. Those present at the emergency situation will be interviewed by the investigating party as soon as practicable after the emergency.

A written report on the incident to be prepared. The report will include a review of the ERP and any recommendations with respect to proposed changes that are required. It is anticipated that the report will be produced by the investigative team within 30 days of the emergency or as appropriate to the situation and regulatory requirements. The report will contain, but not be limited to the following information:

- Executive Summary
  - Objectives of the report
  - Summary and conclusions
  - Recommendation consisting of corrective measures, including the ERP review updates and preventative measures (if any).
- Main Section:
  - Introduction
  - Findings of the report
  - Detailed description of the incident and adverse effects, identification of the root cause(s), discussion of any “quick fixes measures” to prevent reoccurrence while longer term corrective actions are identified, preventative actions proposed to

prevent reoccurrence and when to review these corrective actions to assess their effectiveness

- Any residual adverse effects (if applicable)
- Any view(s) from Indigenous groups and advice from relevant authorities
- Any relevant operating history of the site
- Appendices (as appropriate).

If applicable, a copy of the Report will also be provided to the Impact Assessment Agency of Canada no later than 30-days after the day on which the incident occurred (as per EA condition of approval 9.4.2). A report is also required no later than 90-days after the incident describing the changes made to avoid a subsequent occurrence.

## 11 Document Control

During Construction, the current ERP and related policies, plans and procedures will be controlled by GGM in Prism. For specific facilities, such as the TMF, emergency preparedness procedures will also be outlined in an Operations Maintenance and Surveillance Manual (OMS). Copies of the specific OMS Manuals will be kept at the location where the facility is managed. Copies of the ERP will also be kept at the following site locations:

- Site Administration Building
- Safety Office (if separate from the Project Office)
- Emergency Response Commander's Office
- Community Relations Office (Geraldton)
- First Aid room(s)
- GGM's Corporate Office

## 12 Training

Training is an essential part of this ERP. Training will be arranged for personnel (including contractors) as appropriate to their duties. This may include but not be limited to:

- Orientation training for all personnel including actions on discovering an emergency, actions on alarms, and the location of Muster Points;
- Specialized training for operational personnel in this procedure and roles during an emergency;
- Ongoing training as relevant to everyone in fire procedures, first aid, CPR, etc.; and,
- Emergency response training.

Records of the training programs, who has attended, and the results will be retained by the GGM HS Department.

### 13 Emergency Simulations

Once in Operations, evaluation of the plan will be conducted through simulated emergency exercises. These simulated emergencies will involve GGM personnel, contractors and visitors. Exercises may be tabletop exercises leading to a walk-through exercise or a full simulation with third party responders.

During these exercises, observers will be monitoring the actions taken by personnel to develop feedback for the purpose of improving the ERP and communications. Observations and improvement actions will be tracked internally by GGM. Coordination of the exercises is the responsibility of the ERC as well as Security personnel.

### 14 Review

In addition to review and revision arising from real emergency situations and training exercises, this ERP will require ongoing amendments to take account of any significant changes to mine development, plant expansion, and changes to regulatory requirements.

Periodic review is performed with updated information as required. This ERP shall be reviewed and updated prior to Pre-Commissioning. During operations GGM, will review the ERP annually. Reviews and approval of amendments is the responsibility of the ERC or designate. To ensure compliance with the need for review and revision, this ERP shall be included in GGM corporate audits.

### 15 Reference Documents

Throughout this ERP several documents, manuals etc. have been referenced and should be read in conjunction with this ERP. The documents include:

- Communications Plan
- Fire Prevention and Protection Procedure
- Incident Reporting Procedure
- Traffic Management Procedure
- Traffic Management Plan (under development)
- Severe Weather Procedure
- Spills Prevention and Contingency Plan



## 16 APPENDIX A – Mine Site Layout with Muster Points

*To be developed prior to start of the main construction work at site. Interim maps will be posted for specific activities as needed pre-construction.*