



**Black Point Quarry
3500 Highway 16
Municipality of the District of Guysborough, Nova Scotia**

Emergency Response Plan

Note to reviewers: this Emergency Response Plan to be revised and updated once the HSE Coordinator and other site staff have been hired. Ultimately, this Plan may be combined with the Spill Contingency Plan. Blue highlights indicate text to be updated.

October 2024

Document Revision Record

Table to be completed following annual review of the Plan by Mine Manager and HSE Coordinator			
Revision Level	Revised by	Date	Pages Affected
1	Dmytriw	9/24/2024	All
2	Brunson	4/21/2025	All

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1. BPAI Policy

Black Point Aggregates Inc. (**BPAI**) is committed to ensuring the safety of its workers. The company will implement the Emergency Response Plan (**ERP**) through effective communication, review, practice and updating of the ERP.

The ERP is a guidance document for the BPAI management, workers, contractors and external responders to assist in the response to accidents, malfunctions and extreme weather events. BPAI is committed to an annual review of the ERP to ensure that arising issues are addressed and changes documented. In the event of significant site or operational modifications and following any emergency incident, the company will review the ERP to ensure that its content and planning continue to be relevant and up to date.

The commitment to communication will ensure that employees are trained in their responsibilities according to the ERP. Site wide communication of basic responsibilities will be shared with new employees as part of their orientation. Once approved, ongoing and updated changes to the ERP will be communicated to BPAI staff.

2. ERP Purpose

This Emergency Response Plan (**ERP**) assesses hazards and describes initial responses to the types of emergency events listed below. The hazards resulting from accidents, malfunctions and extreme weather are assessed in order to determine the potential adverse environmental effects that may occur so that mitigation measures can be planned, staff trained, and response equipment pre-positioned. The ERP also describes BPAI roles and responsibilities, staff and contractor training, emergency event notification and incident reporting procedures.

2.1 Hazard Types and Risk Assessment

The ERP addresses the hazard types listed below. The hazards, their risks and specific emergency responses are described in **Appendix A**.

1. Medical and First Aid Emergencies
2. Arising Operational Hazards (closed space entry, trips and slips, etc.)
3. On Site Fire and Explosions
4. Off Site Forest Fires
5. Mobile Equipment Incidents
6. Structural Failure (pit wall, sedimentation pond, etc.)
7. Marine Terminal Incidents

8. Extreme Weather, Earthquakes and Tsunamis

9. Unexpected Discoveries (Non-Emergency Protocols)

Additional stand-alone plans describe BPAI response to other emergency events: the **Spill Contingency Response (SPC) Plan** documents response to spills of fuel, dangerous wastes and explosives, while the **Marine Oil Spill Emergency Measures Plan** (Appendix C to the SPC Plan) documents BPAI response to spills to the marine environment.

3. Emergency Response Organization

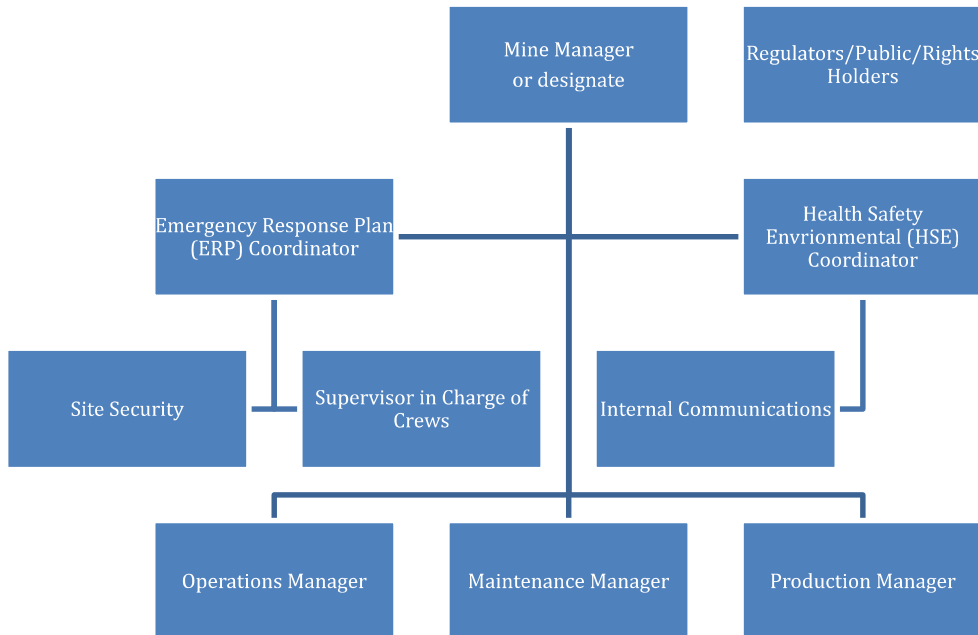
3.1 Chain of Command

The ERP will be implemented by the **Mine Manager as Response Commander** or designate, in conjunction with the **Health Safety & Environmental (HSE) Coordinator**. An **Emergency Response Plan Coordinator** shall be appointed to assist the Mine Manager in developing and implementing the Emergency Response Plan.

Management support is essential for the Emergency Response Coordinator to successfully implement the ERP. Management shall also assist in selecting an Emergency Response Planning Group to divide the workload of organizing and implementing the ERP.

In the event of a serious incident, release, or failure, the incident command structure (below) and the Incident Command Center (**ICC**) will be activated if required.

Chain of Command Hierarchy:



3.2 Duties and Responsibilities

The emergency response roles and actions of key staff are described in **Appendix B**. These roles and designated actions will be reviewed annually.

4. Communication Plan

4.1 Notification to On-Site Workers

In the event of an emergency, an air horn will be sounded and notification will be made over the on-site radio system directing personnel to muster stations while command and control is established. **Example** muster stations, escape routes and alternate escape routes are shown on the mine map in **Appendix C1**, which also shows the location of emergency response and first aid equipment. **Note to Plan: replace the example in App C1 with a Figure to be created/updated once equipment list and site layout is finalized.** **Appendix C2** contains a list of emergency response equipment on the site. **Note to Plan: Appendix C2 to be updated once equipment list is finalized and approved.**

Command and control is established via the roles and responsibilities listed in **Appendix B**. Key staff are notified during this process and the Incident Command Center (**ICC**) is set up to direct subsequent actions. The immediate call-out procedure is shown below; reference telephone numbers for BPAI management are given in **Table 1** while telephone numbers for external contractors, regulators, and non-emergency notifications are listed in **Table 2**.

Immediate Call Out Procedure

1. **Call 911 in the case of serious injury, fire or explosion**
2. Notify the Mine Manager and/or Designate
3. Notify the HSE Coordinator
4. Notify Production and Maintenance Managers
5. The Mine Manager will notify senior BPAI managers and others as described below.

Table 1: BPAI Mine Management Contact Numbers

Name	Role	Phone
xxx	Mine Manager/Response Commander	xxx
xxx	ERP Coordinator	xxx
xxx	HSE Coordinator	xxx
xx	Operations Manager	xxx
xxx	Production Manager	xxx

xxx	Maintenance Manager	xxx
xxx	Other	xxx

4.2 Notification to External Responders

The Mine Manager or his/her designate has the sole responsibility to alert external emergency responders not initially mobilized by calling 911 (e.g., spill clean-up contractors).

A list of external emergency and non-emergency contacts is given in **Table 2**.

For all *environmental* emergencies, including spills, call **1-800-565-1633**. This is the number for the Maritime Regional Office Canadian Coast Guard, Fisheries and Oceans Canada. It is a 24-hour telephone number with an Environmental Emergency Responder on call to respond to all environmental emergencies. Calls will be directed to the appropriate reporting authorities, including Nova Scotia Environment, Fisheries or Climate Change Canada.

The Occupational Health and Safety Act states that employers must report any accident at the workplace that results in bodily injury, including unconsciousness, third degree burn, loss of sight in one or both eyes, poisoning, asphyxiation and any injury that requires the admission to hospital, endangers life, is likely to be fatal or results in death. The major release of a hazardous substance in a workplace must also be reported. To report an incident to the Nova Scotia Occupational Health and Safety division, call **1-800-952-2687** as soon as possible.

The Workplace Hazardous Materials Information System (**WHMIS**) applies to chemicals under the employer's control that could result in a spill and requires that a Safety Data Sheet (**SDS**) is on hand in the event of a spill. This document is essential to providing information on first aid and proper measures for accidental releases, including personal precautions, protective equipment, emergency procedures, containment and cleaning up.

According to the Federal Fisheries Act, the release of any substance (in any amount) that may be harmful to fish or fish habitat into water frequented by fish must be reported to a fisheries officer.

It is important to note that any amount of spilled material, including quantities less than those listed, could be harmful to migratory birds. All spills that have the potential to impact wildlife, regardless of if the spill is reportable, will be evaluated to determine if it could be harmful to migratory birds or other wildlife. Injured wildlife should be reported to a local rehabilitation center or coordination and response. Bird mortality incidents of 10 or more birds in a single event, or an individual species at risk, should be reported within 24 hours of the event to ECCC-CWS Main Office (see Table 3).

4.3 Notification to Government, Community and Indigenous Contacts

As noted, the Mine Manager or his/her designate has the sole responsibility to notify regulators, Indigenous communities, and others in response to an emergency event. Please see section 8 for the preparation of external reports to regulatory agencies.

Table 2: Non Emergency Notification Contact Numbers

Organization	Name / Role	Contact
Government Contacts		
Impact Agency of Canada (IAAC)	Victoria Shore Sarah Devin	postdecision@iacc-aeic.gc.ca
NS Department of Natural Resources and Renewables (NSDNRR) – Geoscience and Mines Branch	TBD	902-424-2035 gmb@novascotia.ca
NS Department of Environment and Climate Change (NSECC) - xxx Branch	Sean Gillis Inspector - Antigonish or the Engineer	902-863-7389 sean.gillis@gov.ns.ca
Special Places Program Coordinator, Department of Tourism, Culture and Heritage	John Cormier, Special Places Program Coordinator	902-424-4542
Community Contacts		
Municipality of the District of Guysborough	TBD	TBD
Guysborough County Inshore Fisherman's Association	Ginny Boudreau	gcifa@gcifa.ns.ca
Community Liaison Committee	TBD	TBD
Indigenous Contacts		
Paq'tnkek First Nation	Rose Paul	TBD
KMKNO (Mi'kmaq Rights Association)	Patrick Butler	TBD pbutler@mikmaqrights.com
KMK Archaeological Research Division, Senior Archaeologist	Heather MacLeod-Leslie	902-956-4247

4.4 Public Relations and Media

All external communication to the media and public will be completed by approval from the the Mine Manager (or designate) of BPAI.

Basic protocols include:

- In the event of a serious injury, families must be informed as early as possible and prior to any media releases.

- All outside calls should be directed to the BPAI designate responsible for public and media relations. A process for managing media outreach or follow-up questions will be determined on a case-by-case basis. If warranted, a notification process and/or call-line for local residents, media and members of the public who may seek information regarding a significant event may be developed.
- In the event of a significant environmental release or safety incident, a press release narrative will be developed and reviewed by the Mine Manager/Response Commander (or designate) prior to being released to any news or media outlets.

5. Incident Command Center (Mine Office)

5.1 When the ICC is Activated

The Incident Command Center (**ICC**) will be activated in the event of a Level 2 or Level 3 incident.

Level 1: A minor incident, accident or malfunction that is confined to the immediate quarry site and can be handled by BPAI/available contractor personnel using the response resources, manpower and equipment at hand. This would include (for example) minor injuries, vehicle fender-benders or a Level 1 spill (i.e., a spill less than the “Reportable Quantity” amount on **Table 6** in the Spill Contingency Response Plan.

Response to a Level 1 incident consists of:

1. Discovery and reporting of the incident to the worker’s or contractor’s immediate supervisor. Supervisors must obtain precise information about the incident from the individual(s) who discovered the incident so that an **Incident Report Form (Appendix D)** can be completed later.
2. The immediate supervisor evaluates the situation and initiates early and immediate action, then determines which other staff (if any) must be informed for follow-up decision making.
3. Upon being alerted by the responding immediate supervisor (if needed), the supervisory team decides upon and initiates an appropriate Level of follow up response.
4. The supervisory team directs monitoring of the situation, as well as reporting and notification as needed.

Level 2: A major accident or malfunction resulting in serious injury and/or where employee safety is at risk and/or where the event has spread beyond the quarry site, and/or where external resources (i.e., emergency services or contractors are required. This would include (for example) incidents requiring an ambulance or fire department response, a significant fire or explosion, structural failure, or a Level 2 spill (i.e., a spill in excess of the “Reportable Quantity” amount on **Table 6** in the Spill Contingency Response Plan.

Response to a Level 2 incident consists of:

1. Discovery and reporting of the incident to the worker's or contractor's immediate supervisor. Supervisors must obtain precise information about the issue from the individual(s) who discovered the incident so that an **Incident Report Form (Appendix D)** can be completed later.
2. The worker, contractor or immediate supervisor calls 911 in the event of a serious injury, fire or explosion and notifies the Mine Manager or his/her designate. The Mine Manager determines whether to issue an emergency alert to all workers on site, which would require them to assemble at their muster stations.
3. The Mine Manager in his/her role as Response Commander reports to the Mine Office where he/she establishes the Incident Command Center (**ICC**), informs other management staff and convenes an incident response team as needed.
4. The Mine Manager/Response Commander directs response actions including mobilizing BPAI staff, engaging offsite responders, notifying stakeholders and rights holders and documenting/reporting the incident as needed.
5. In the event that emergency assistance is requested, the Response Commander (or designate) will meet the emergency personnel at the main gate entrance to the mine site. The supervisor or designate will direct the responder to the site of the accident or malfunction.

Level 3: A major evolving or approaching event that will likely occur over several days or longer, and that may or may not result in injury, risk of injury, damage to BPAI property and/or interruptions to quarry operations. This would include (for example) an approaching forest fire, hurricane, severe winter storm, ice storm, flood event, etc.

To the extent possible, a Level 3 response should be triggered by the Mine Manager in a proactive precautionary manner before the expected event occurs. Due to escalating, worsening or long-duration conditions, the ICC may be required to provide coordination, resource management, information management and overall site support during a Level 3 event. Early establishment of the ICC by the Mine Manager will permit effective preparation, communication, and response as the event unfolds.

Response to a Level 3 event will depend on the nature, severity and duration of the event; various 'natural disaster' response scenarios will be practiced by BPAI staff and managers on an annual basis.

5.2 Location of the ICC

The **ICC** will be established on site at the Mine Office and associated conference room. The Mine Office is equipped with an emergency generator in case of a power failure while the conference room has:

- A copy of the Emergency Response Plan and Spill Contingency Response Plan with contact numbers for external responders
- Internet — WIFI and cable direct
- Cellular signal and signal boosters; landline telephone

- First Aid equipment, PPE and Spill Response Kits

In the event of ICC activation, the mine's current Sign-In/Sign-Out procedure will be used, however the sign out process will be directed by the members of the ICC as directed by the Response Commander.

The ICC's responsibilities include ensuring that:

- All staff are accounted for.
- All appropriate persons and agencies are notified.
- Medical and first aid facilities are available.
- Supplies are available, as required.
- Support equipment is available, as required.
- Transportation is available, as required (i.e., patients to hospital).
- Mine rescue teams are operating as planned.
- Providing information in a controlled manner, as required.
- Providing management with professionally skilled personnel needed to support command decisions.
- Ensuring that alternates for personnel, supplies and special services are available.

6. Emergency Notification Contact Numbers

Table 3 "Emergency Notification Contact Numbers" above provides a list of external emergency and non-emergency contacts.

Injury or Fire: **Call 911**

The BPAI quarry is located within the Municipality of the District of Guysborough at civic address 3500 Highway 16. Emergency response obtained by dialing 911 is provided by first responders from Guysborough, Queensport or Canso depending on the nature of the emergency. The nearest fire responders are located in Queensport at the Chedabucto Fire Station, located 5615 Highway 16, Queensport.

Equipment and Service Contractors (see Table 2 for contact numbers)

Spill response contractors, vacuum trucks, and waste disposal services can be sourced from:

- **Point Tupper Marine Services Ltd (PTMS)**, Point Tupper. PTMS is a federally certified marine oil spill response agency;

- **Mattle Brothers Construction Ltd (MBCL)**, RR#1 Monastery, Antigonish. MBCL is a provincially certified responder for domestic oil spills;
- **Mill Creek Environmental Services** (including marine service), 276 Sable Drive Sydney, NS;
- **Clean Harbours / Debert Technical Services** located in Debert, NS - for disposal of wastes and fuel contaminated soil;
- **United Rentals** located in Port Hawkesbury, NS can provide a variety of rental equipment, including emergency response-related material; and
- **Irving Equipment**, where lift cranes can be rented, located at 43 Atlantic Street in Dartmouth.

Search and Rescue

The Joint Rescue Coordination Center (JRCC) Halifax leads and directs all search and rescue efforts in eastern Canada. In the event of a marine emergency the supervisor in charge must notify the JRCC on Marine 16 or by direct dialing. +1 902 427 8200 or 1-800-565-1582 (Atlantic Region toll free)

East Coast Response Centre - for significant marine fuel spills; BPAI would need to establish a contract with them before work begins. This may become part of the NSAP Review process.

Table 3: Emergency Notification Contact List

1. Black Point Quarry Staff	
Mine Manager – Response Commander (24 hours)	TBD
ERP Coordinator (24 hours)	TBD
HSE Coordinator (24 hours)	TBD
Site Security (24 hours)	TBD
Project Questions and Complaints	205-298-3189
2. Government and NGO Contact Information	
Emergency: Fire Department and Ambulance Dispatch	911
NS Environmental Emergencies (oil spills, etc.)	1-800-565-1633 or (902) 426-6030
CANUTEC Emergency (Canadian Transport Emergency Centre – Dangerous Goods Emergency)	1-888-226-8832 or *666 on a cell phone (24-hr emergency line) 1.866.814.1477 (Regional Office)
CANUTEC Information (non emergencies)	1-613-992-4624
24-hour marine incident and emergency reporting line	1-888-850-4625
Marine Animal Rescue Society (MARS)	1-866-567-6277
Nova Scotia Environment & Climate Change - Antigonish Office	902-863-7401
Fisheries and Oceans Canada - Maritimes Regional Office (24 hr)	1-902-426-3550 or 1-800-565-1633
Sydney MCTS Officer in Charge (Canadian Coast Guard)	1-902-564-7752
Search and Rescue (Joint Rescue Coordination Center (JRCC) Halifax	1-902-427-8200 or 1-800-565-1582
Transport Canada (Marine Safety) Regional Transportation Centre (Dartmouth Office)	(902) 426-7725 or 1-800-387-4999
Emergency Management Office (wild fires, disaster preparation)	1-866-424-5620
Transport Canada – Navigable Waters Protection (Dartmouth Office)	1-902-426-5907
Nova Scotia Department of Natural Resources	1-800-565-2224 (Forest Fire Reporting) (902) 424-5935 (Other Inquiries)
Nova Scotia Museum (Archaeological Reporting)	(902) 424-7344

Guysborough RCMP Detachment	(902) 533-3801 (non-emergencies)
Guysborough Fire Department	902-533-2413 / 3577
Guysborough Hospital	(902) 533-3702
District of Guysborough	902-533-3705
Canso Fire Department (non emergencies)	(902) 366-2798
Regional Medical Officer of Health (Eastern Zone)	Dr. Jesse Kancir, 23 Bay Street, Antigonish xxx
Provincial Poison Control Centre	1-800-565--8161
ECCC-CWS Main Office	(506) 364-5044 or SCFATLEvaluationImpact-CWSATLImpactAssessment@ec.gc.ca
3. Contractors and Support	
Point Tupper Marine Services Ltd (PTMS) – marine oil spills	902-625-1711
Mattle Brothers Construction Ltd (Antigonish, NS) - terrestrial oil spills	902-232-2582
Mill Creek Environmental Services (Sydney, NS) - various services	902-539-6161
Clean Harbours (Debert, NS) - waste disposal	902-662-3336
United Rentals (Port Hawkesbury) - emergency equipment rental	902-625-2232
Irving Equipment (Dartmouth NS) - crane rentals	800-561-2726
Security	TBD
Media	TBD
Hope for Wildlife	902-407-9453

7. Staff and Contractor Training

Table 3 lists the emergency response training courses applicable to BPAI staff, management and contractors to BPAI. In summary, it consists of mandatory initial site orientation (introductory training on site hazards, WHMIS, fire fighting and emergency response equipment and actions), specific oversight training for supervisory and management staff, and specialized training for certain staff.

Training courses are typically renewed annually. Training records are maintained for all staff and contractors by the HSE Coordinator.

In addition, external responders, such as local fire departments are also invited for site orientation reviews on an annual basis.

Emergency response practice drills (e.g., response to simulated major spills and natural disasters) will be conducted on the following schedule.:

- Annual Evacuation Practice Drill – staff and management
- Annual mine rescue through quarterly training.
- Biannual tabletop emergency preparedness and response drills (management)

Table 4: Summary of Emergency Response Training

Name of Training	Who	Timing / Renewal
<ul style="list-style-type: none"> • Site Orientation • Basic First Aid • Basic Fire Fighting • WHMIS 	<ul style="list-style-type: none"> • All BPAI staff incl. management • All new BPAI staff • All contractors 	<ul style="list-style-type: none"> • First week upon hire / annual review • At contractor first site visit / annual renew
<ul style="list-style-type: none"> • SPC Training 	<ul style="list-style-type: none"> • All BPAI staff incl. management • All new BPAI staff • All contractors 	<ul style="list-style-type: none"> • At initial orientation to site then annually
<ul style="list-style-type: none"> • Incident Command Structure 	<ul style="list-style-type: none"> • Mine Manager, HSE Coordinator, ERP Coordinator • Operations Manager, Maintenance Manager, Accounts Manager, • Mine Rescue Captains. 	<ul style="list-style-type: none"> • Yearly review of ERP/SPC • Annual review of company structure within ERP • Tabletop exercise (2 years)
<ul style="list-style-type: none"> • Incident Command Center 	<ul style="list-style-type: none"> • Mine Manager, HSE Coordinator, ERP Coordinator • Operations Manager, Maintenance Manager, Accounts Manager • Mine Rescue Captains. 	<ul style="list-style-type: none"> • Annual review of company structure • Tabletop exercise (2 Years)
<ul style="list-style-type: none"> • Site Awareness 	<ul style="list-style-type: none"> • Guysborough County Volunteer Fire Department • Ambulance • Spill Response Contractors • Mine & Operations Managers 	<ul style="list-style-type: none"> • Yearly
<ul style="list-style-type: none"> • Mine Emergency Response Plan 	<ul style="list-style-type: none"> • Mine & Operations Managers Maintenance & Accounts Managers • Mine Rescue Captains. • All BPAI staff 	<ul style="list-style-type: none"> • First week upon hire / annual review • At contractor first site visit / annual renew

<ul style="list-style-type: none"> Advanced CPR / First Aid Training 	<ul style="list-style-type: none"> Mine & Operations Managers Maintenance & Accounts Managers Mine Rescue Captains. Shift Supervisors 	<ul style="list-style-type: none"> Biennial
<ul style="list-style-type: none"> Advanced Fire Response 	<ul style="list-style-type: none"> Mine & Operations Managers Maintenance & Accounts Managers Mine Rescue Captains. Shift Supervisors 	<ul style="list-style-type: none"> Biennial

8. Incident Documentation and Reporting

All accidents, malfunctions, emergency response events and incidents causing bodily harm shall be documented in the **Incident Report Form (IRF - Appendix D)**. The IRF shall be completed by the person responsible for the incident and/or who first discovered the event and shall include statements from other participants as needed. The IRF shall be reviewed and signed off by the employee's immediate supervisor and/or the HSE Coordinator.

In addition, in the event that the accident or malfunction has the potential to cause adverse environmental effects, the HSE Coordinator shall:

1. notify¹ relevant federal and provincial authorities and Indigenous groups of the accident or malfunction as soon as possible and, in writing, the Impact Assessment Agency of Canada (IAAC - see **Table 2** for contact information);
2. submit a written report to the Impact Assessment Agency of Canada (IAAC) no later than 30 days after the day on which the accident or malfunction took place. This report shall also be submitted to the Nova Scotia Department Environment and Climate Change. The written report shall include:
 - a description of the accident or malfunction and of its adverse environmental effects of the accident or malfunction;
 - the measures that were taken by the Proponent to mitigate the adverse environmental effects
 - any views received from relevant federal and provincial authorities and Indigenous groups with respect to the accident or malfunction, its adverse environmental effects or measures taken by the Proponent to mitigate adverse environmental effects;
 - a description of any residual adverse environmental effects, and any additional measures required by the Proponent to mitigate residual adverse environmental effects; and
 - details concerning the implementation of the Emergency Response Plan.

¹ As required by IAAC 7.4 (a federal condition of Environmental Assessment Approval).

3. In addition, the HSE Coordinator shall submit a written report to the Impact Assessment Agency of Canada no later than 90 days after the day on which the accident or malfunction took place, on the changes made to avoid a subsequent occurrence of the accident or malfunction, and on the implementation of any additional measures to mitigate residual adverse environmental effects taking into account the information in the initial written report referenced above.

Appendix A Hazard Types and Response

Hazard Types and Response

1. Medical and First Aid Emergencies

Description

Medical emergencies may include workplace injuries (e.g., heat stroke, cuts, sprains, broken limbs, concussions, burns, etc.) or a non-work related incidents such as heart attacks or strokes. Medical emergencies can trigger a Level 1 or Level 2 response depending on the severity of the emergency.

Preparation

- Designate trained first aid responders who can provide immediate assistance.
- Establish a clear protocol for assessing the nature and severity of injuries.
- Ensure automated external defibrillators (AEDs) and first aid kits are easily accessible throughout the site and are adequately stocked. Replace used or expired supplies as needed.
- Train personnel in CPR, the use of AEDs, basic first aid, and emergency response procedures.
- Have a designated area for providing medical assistance, away from hazards.
- Establish communication channels for contacting emergency medical services.
- Maintain records of medical incidents and treatments for follow-up and analysis.

Response

For serious medical emergencies, the following general steps should be undertaken:

1. The first person on the scene must assess the nature and severity of the situation then ensure that there is no danger to themselves or others prior to responding to the emergency.
2. Contact HSE Coordinator who will respond to scene or immediately call 911 to request medical assistance, as the case requires.
3. Provide first aid/CPR if trained and able to do so.
4. Stay with the injured person until emergency responders arrive.
5. Once First Aid/Mine Manager arrive, they will take over first aid responsibilities. The first person on scene will remain to provide details of the incident.
6. If possible, transfer the patient to the designated area for providing medical assistance.
7. First Aid/Mine Manager will determine if further actions such as a 911 response is required.

8. If the patient cannot be moved from the site, the First Aid/Mine Manager may request medical support be brought to the site.

For non-serious injuries, the following general steps should be undertaken:

1. The first person on the scene must assess the situation to ensure that there is no danger to themselves or others prior to responding to the emergency.
2. Administer first aid if qualified.
3. Contact First Aid/Mine Manager to request assistance on the incident and receive additional instructions.

2. Arising Operational Hazards

Description

Arising operational hazards refers to any on-site activity that may result in an accident or malfunction causing bodily injury or interruption to quarry activities. These hazards may include, for example, welding accidents, trip/slip hazards, heavy lifting, temporary excavations, on-site electrical work, confined space entry, working at heights, etc. These hazards typically require a Level 1 response but more significant incidents may trigger a Level 2 response.

Preparation

- Conduct thorough risk assessments before engaging in hazardous activities.
- Implement safety protocols and procedures specific to each operational hazard.
- Provide training and certification for personnel involved in hazardous tasks.
- Ensure the availability and proper use of personal protective equipment (PPE).
- Establish clear communication channels for reporting hazards and incidents.
- Monitor hazardous activities closely and intervene if unsafe conditions arise.
- Have safe work practices in place for operational activities and hazard control.

Response

1. In case of bodily injury, please see Medical and First Aid Emergencies above. In the case of an incident causing disruption to site activities (without injury), the Mine must be informed immediately.
2. The worker responsible for the incident, or who first observed it, must remain available to describe the event and fill in the **Incident Report Form (Appendix D)**.

3. On Site Fire and Explosions

Description

A fire may occur due to an equipment accident or malfunction, human carelessness, or natural causes such as a lightning strike under dry conditions. A fire at the bulk fuel storage facility or within the maintenance shop may lead to an explosion. The immediate concern with a fire is for human health and safety; additional concerns include habitat loss, direct mortality to wildlife, and loss or damage to property. Fires and explosions often require a Level 2 response although minor fires may only trigger a Level 1 response.

Preparation

- Establish fire prevention measures, including proper storage of flammable materials.
- Install and maintain firefighting equipment, such as fire extinguishers and sprinkler systems.
- Conduct regular fire drills to ensure personnel know muster points, evacuation routes and procedures.
- Designate assembly points for evacuees to gather safely away from the site.
- Train personnel in fire safety procedures, including how to use fire extinguishers.
- Develop a protocol for reporting fires and activating emergency response procedures.
- Coordinate with local fire departments for assistance and support.

Response

1. If it is safe to do so, the individual on scene may attempt to extinguish the fire. The Mine Manager will be contacted on the radio. He will determine as to whether 911 will be initiated requesting assistance from local Fire/Rescue
2. All other individuals should immediately evacuate the building or area using the closest and safest route and alert others as they leave.
3. The Mine Manager will take control of the scene when they arrive.
4. If the fire or explosion is large, the Mine Manager and/or his designee will initiate firefighting procedures if safe to do so, until relieved by the local Fire Dept.

Evacuation Procedures (indoors):

- Upon discovering a fire or hearing the fire alarm, immediately proceed to the nearest exit.
- Close doors behind you to slow the spread of fire and smoke.

- Assist individuals with disabilities in evacuating, if necessary.
- Feel doors for heat before opening; if hot, do not open.
- If smoke is present, stay low to the ground where the air is cleaner.
- Proceed to the designated muster point and remain there until further instructions are given.

Reporting Procedures:

- Call 911 to report the fire. Provide the location and details of the situation.
- Notify the HSE Coordinator or designated personnel of the fire incident.
- Do not re-enter the building until authorities declare it safe to do so.

Fire Suppression

- If safe to do so and trained, use fire extinguishers to suppress small fires.
- Do not attempt to extinguish large or spreading fires; evacuate immediately.
- Close doors behind you to contain the fire if possible.
- Alert others to the fire as you evacuate

4. Off Site Forest Fires

Description

Offsite wildfires may threaten BPAI infrastructure and personnel through direct ignition and smoke damage /inhalation causing illness. Road closures and power outages may be expected, which in turn may prevent emergency responders and BPAI staff from accessing the site and/or disrupt site supply chains. The immediate concern with a forest fire is for human health and safety; additional concerns include habitat loss, direct mortality to wildlife, and loss or damage to property. Wildfires require a Level 2 response; severe or rapidly moving fires may initiate a Level 3 response.

Preparation

- Monitor weather conditions and fire danger ratings to anticipate potential risks.
- Establish communication channels with local fire authorities for updates and alerts.
- Develop evacuation plans for personnel if the fire threatens the site.
- Implement fire prevention measures, such as clearing vegetation and maintaining firebreaks.
- Train personnel in wildfire safety including evacuation routes and sheltering options.

- Provide resources and support to firefighters and emergency responders as needed.
- Communicate with neighboring properties and communities to coordinate response efforts.

Response

In the event of a forest fire, the following general procedures will be followed by all Project employees and contractors:

1. The Fire Department will be notified immediately at 911;
2. (Forest) Fires must be reported immediately to NSDNR at 1-800-565-2224;
3. The Mine Manager will be notified immediately;
4. As the situation evolves and in communication with provincial and local authorities, the Mine Manager with support from the HSE Coordinator will coordinate BPAI staff response including evacuation and site lockdown measures

5. Mobile Equipment Incidents

Description

Vehicular collisions may occur during any phase of the Project. The vehicles operating at the site will include bulldozers, haul trucks, loaders, service vehicles (pick-up trucks) and company cars. Off-site contractors may also access the site in their own vehicles. A vehicle collision may result in bodily injury, a fuel spill, fire and explosion. The largest vehicle is the haul truck and could contain up to 871 L of diesel fuel: maximum that would be spilled in the event of a collision between two such vehicles is 1,742 L. Fuel spills may in turn contaminate soil, surface water and groundwater. Vehicle accidents may trigger a Level 1 or Level 2 response.

Preparation

Traffic patterns, speeds, and right-of-way signage and training will minimize the risk of vehicle collisions on the site. Operators of mobile equipment operators and all contractors entering the site will receive initial and annual training on safe equipment operation and site geography, blind spots, environmentally sensitive areas, etc. In addition, BPAI will:

- Implement strict safety protocols for operating and maintaining mobile equipment.
- Provide training and certification for equipment operators.
- Conduct regular inspections and maintenance checks to identify potential hazards.
- Establish clear communication protocols for signaling and coordination between operators.
- Ensure proper traffic management, speed control and signage to prevent collisions and accidents.

- Develop procedures for responding to equipment malfunctions, rollovers, and collisions.
- Provide emergency response training to personnel to mitigate injuries and damage.
- Ensure fire extinguishers are available in BPAI vehicles.

Response

In the event of a vehicular collision

1. Raise the alarm, call via on-site radio system stating “Emergency, Emergency, Emergency, and then provide particulars of the emergency. i.e., emergency type (vehicle accident), location, number of people involved.
2. Immediately inform the Mine Manager who in turn will assess the accident and determine required assistance and response Level.
3. Alert the Spill Response Team if needed

6. Structural Failures

Description

6a Quarry Pit Wall or Ramp Failure

The granite rock to be quarried is dense and has a very high compressive strength. Therefore, any potential pit instabilities are likely to be structurally controlled (along major joints/discontinuities). Rock face failure may result in worker injury or death and damage to vehicles resulting in petroleum product release.

6b Aggregate Stockpile Slope Failure

Aggregate stockpile failure would be contained entirely within the coastal platform near the processing plant, since this entire area will be sloped to south during initial site preparation to help accumulate stormwater runoff needed for the aggregate washing.

Given the confining effect that will result by sloping the coastal platform to south, aggregate stockpile failure will not result in any environmental impacts. However, aggregate stockpile failure may result in worker injury or death, as well as damage to conveyors and processing equipment.

6c Sedimentation Pond Failure

The laydown area containing stockpiled materials will be designed to contain and direct runoff to the settling or sedimentation ponds and, under normal weather conditions, it is anticipated that there will be no water discharge from the operation. The engineered settling ponds cannot “fail” in the sense of a wall breach since they will be excavated into rock and bermed with several meters of stone. The ponds may overflow, particularly during a prolonged storm event, but each pond is equipped with pumping

capabilities so excess water can be directed to the quarry pit to prevent discharge to the greatest extent possible.

Structural failures may trigger Level 1, Level 2 or Level 3 responses depending on the nature and extent of the failure.

Preparation

- Conduct regular inspections and monitoring of structural integrity.
- Implement engineering controls and stabilization measures to prevent failures.
- Establish evacuation procedures for personnel in areas at risk of structural failure.
- Provide training for personnel in recognizing warning signs and responding to emergencies.
- Develop contingency plans for evacuating nearby areas and mitigating environmental impacts.
- Coordinate with engineering experts and regulatory agencies to assess risks and implement solutions.
- Document and analyze incidents to identify root causes and prevent future failures.

Response

Quarry Pit Wall / Ramp Failure

1. The first person to see a structural failure in the pit or ramp must sound the alarm and call over over the on-site radio by calling “Emergency Emergency Emergency” and then explaining the situation, including the location and scale of the failure. The same procedure must be followed if a regularly scheduled inspection suspects that a failure may be imminent.
2. All operations will stop and personnel will follow evacuation procedures and relocate to assigned muster points.
3. The first person or radio dispatcher then notifies the Mine Manager and the HSE Coordinator to decide upon next steps.
4. All mine rescue captains; supervisors and managers will complete a roll call for their crews at each muster area. The Mine Manager or his/her designee will be responsible for reviewing the contractor sign in sheet and accounting for the names on the sign in list.
5. Rescue operations to follow if personnel are missing.
6. Scene control (i.e., posting guards, setting up orange warning cones, barricades, flashing lights, etc.) should be implemented as soon as possible.

7. Upon the Mine Manager's direction, a Professional Engineer should be consulted as soon as possible to inspect the facility, if necessary, and advise on the steps required to stabilize the facility and resume operations.
8. The Mine Manager will develop and implement a recovery plan and schedule of site access.

Aggregate Stockpile Failure

1. As above
2. When the failure area is secured, and depending on the scale of the failure, the stockpile slope would be re-contoured in place. Slumped material would be excavated and returned to the stockpile, and if required, drainage ditches would be repaired.

Sedimentation Pond Failure

In the event of an overflow, water would be contained within the site due to the south facing slope of the lower platform. The two sedimentation ponds (RE1 and RE2) together will hold approximately 67,947 m³ (approximately 18 million US gallons). Calculations indicate the lower platform can accommodate over 28,000 m³ of water. This would flood a small portion of the lower platform to an approximately depth of 30 cm. Such a flood would temporarily halt operations in this area but would not affect processing plant machinery. This flooding would only occur if the electricity failed; should the electric pumps continue to function during a severe storm, then water can be transferred between the settling ponds and the pit sump. The water would be retained in the pit sump until clear, then tested and discharged if needed, or returned to settling ponds.

In a pit flooding event, pit water would be pumped to the sedimentation ponds for clarification prior to discharge. If the sedimentation ponds were already full, the site manager would wait until the water clarified within the sump, sample the clarified water and if found to meet discharge requirements, pump to CB6 for discharge to Chedabucto Bay. This would not interfere with quarrying activities, which could continue elsewhere in the quarry.

7. Marine Terminal Incident

Description

During construction and operation of the marine terminal, considerable vessel activity by multiple ships and boats will occur for limited periods of time around the site. Given this, there is potential for vessel collisions, primarily between aggregate transport ships and either tugs, pilot vessels or nearby recreational or fishing vessels. Other accident types may include collisions with the terminal during bad weather or due to pilot error and grounding of the vessel on submerged rocks. Navigational error, malfunctioning of navigation equipment, engine malfunction and poor weather conditions may all contribute to these accidents.

No fuel will be stored at the terminal and no vessel refuelling will occur at the Black Point Quarry. No vessel maintenance will occur at the terminal. The risk of a fuel or hazardous substance release at the

marine terminal is low because the facility will not be transferring fuel, ballast water, sewage, ship waste or any other material (apart from the crushed stone aggregate) between the ship and shore.

There is a potential for liquid spills or releases in the event of an accident that damages the ship's hull sufficiently to rupture a fuel tank, bilge water tank, or other ship structure that contains fuels, lubricating oils, hydraulic fluids, bilge or ballast water. Such an incident would release the affected material into coastal waters. Factors such as the spill volume and composition, wave, current and wind conditions, and the promptness and effectiveness of response efforts would affect the extent of impact associated with the event. These impacts may include damage to fisheries, impacts to aquatic flora and fauna and waterfowl, as well as coastal impacts from residual material coating the shoreline.

The likelihood of a large ship-to-ship collision event is low given the lack of other large ships near the marine terminal. A collision with a fishing vessel would not likely result in damage severe enough to cause a release from the aggregate carrier but may cause a fuel spill from the smaller vessel. The predominant fuel used by vessels is marine diesel; a typical commercial fishing vessel carries up to 639 L.

In the event of an aggregate carrier tank rupture following an accident at sea, up to 2,000 metric tonnes of marine diesel oil fuel could be discharged to the marine environment.

Incidents at the marine terminal (excluding severe weather events below) would typically trigger a Level 1 or Level 2 response.

Preparation

- Implement safety protocols specific to marine operations, including loading and unloading.
- Provide training for personnel in maritime safety procedures and emergency response.
- Conduct regular inspections of equipment, infrastructure, and vessels for compliance and safety.
- Establish communication channels with port authorities and emergency responders.
- Develop procedures for responding to spills, leaks, fires, and other incidents.
- Coordinate with neighboring facilities and agencies for mutual aid and support.
- Conduct emergency drills and exercises to ensure preparedness and coordination.

BPAI will further mitigate vessel collision risk by ensuring that ship docking at the terminal is pilot assisted and the terminal and mooring structures are properly constructed and well lit. Additional risk mitigation includes controlling vessel speed; scheduling and coordinating activities with other marine users, Transport Canada and the Canadian Coast Guard; and posting Notices to Mariners as needed. The marine terminal will contain navigational aids and anti-collision radar will provide early warning of a potential collision hazard. The Project will also use weather reports and wind speed information to monitor for changing weather conditions that could increase the risk of collisions during vessel navigation to or from the terminal.

Response

Fuel containment would be achieved using booms, absorbents and dispersants deployed from stock on board and/or maintained at the quarry site near the marine terminal. In warm weather, the fuel can be expected to degrade and evaporate over a relatively short time, but this process would be slowed in the winter until the following summer.

More detailed preparation and response information is given in the **Marine Oil Spill Emergency Measures Plan**.

8. Severe Weather, Earthquake or Tsunami

Description

Severe weather includes extreme cold, extreme heat, floods, hurricane/tropical storm, severe snow or ice storm, and high winds. Severe weather events pose various hazards to operations and infrastructure including road closures and power outages, property damage, injury and death as well as habitat loss and plant/animal mortality.

Understanding these hazards and implementing proactive measures, such as infrastructure upgrades, emergency preparedness plans, and risk mitigation strategies, are essential for enhancing resilience and minimizing the impacts of future severe weather events on the quarrying and marine terminal activities. Collaboration with relevant stakeholders, including government agencies, industry partners, and local communities, is critical for effectively addressing these challenges and ensuring the long-term sustainability of operations.

Extreme wind events

Severe windstorms, including hurricanes and nor'easters, can cause extensive damage to infrastructure, such as buildings, equipment, and storage facilities, through high-speed winds, flooding and flying debris.

The quarry and marine terminal infrastructure may be vulnerable to wind damage, particularly if not adequately reinforced or protected. Wind-driven waves and storm surge could also impact marine terminal operations, leading to disruptions in vessel loading and unloading activities.

Heavy Rainfall and Flooding

Intense rainfall associated with severe weather events can result in flash floods, surface runoff and erosion, posing risks to quarry operations, stockpiles, and access roads.

Flooding can disrupt quarry operations by inundating work areas, washing away equipment, and compromising roadways. In the marine terminal, heavy rainfall can lead to sediment runoff and siltation, affecting fish habitat, vessel navigation and berth availability.

Coastal Erosion and Storm Surge

Coastal erosion caused by storm surges and wave action can threaten shoreline infrastructure, including wharves, piers, and conveyor systems at the marine terminal.

The proximity of the marine terminal to the coastline makes it susceptible to erosion and inundation during severe weather events. Coastal protection measures may be necessary to safeguard critical infrastructure and prevent erosion-related damage.

Sea Level Rise and Climate Change Impacts

Sea level rise, exacerbated by climate change, can increase the frequency and severity of coastal flooding and erosion, posing long-term risks to the quarry and marine terminal.

Rising sea levels may necessitate adaptation measures, such as shoreline stabilization, elevation of infrastructure, or relocation of vulnerable facilities. Climate change impacts could also influence operating conditions, supply chain logistics, and regulatory requirements.

Landslides and Slope Instability

Severe weather events, such as heavy rainfall or freeze-thaw cycles, can trigger landslides and slope failures in the quarry's rock faces, posing risks to worker safety and disrupting operations.

Geological hazards, such as unstable slopes and rockfalls, require ongoing monitoring and mitigation efforts to prevent accidents and maintain operational continuity. Proper slope stabilization measures and geotechnical assessments are essential for mitigating landslide risks.

Power Outages and Infrastructure Damage

Severe weather events, including ice storms and high winds, can cause power outages and road closures, damage electrical infrastructure, and disrupt quarry operations and terminal activities.

The reliance of quarry and marine terminal operations on electricity and critical infrastructure makes them vulnerable to service interruptions during severe weather events. Backup power generation and contingency plans are essential for minimizing downtime and ensuring business continuity.

Supply Chain Disruptions

Severe weather events can disrupt transportation networks, including roads, bridges, and ports, impacting the supply chain logistics of raw materials and finished products.

The quarry and marine terminal may experience delays in receiving supplies, shipping products, and accessing markets during periods of severe weather. Contingency plans should address alternative transportation routes, inventory management, and customer communication to mitigate supply chain disruptions.

Preparation

- Monitor weather forecasts, hurricane tracks and seismic activity to anticipate extreme events (HSE Coordinator responsibility).
- Establish an internal alert system to notify all employees (including those off-shift) about the approaching weather event as easily as possible.
- Establish emergency response plans and communication protocols specific to each type of extreme weather or natural disaster.
- Provide training for personnel in recognizing warning signs and responding appropriately.
- Develop evacuation routes and sheltering options for personnel on site. Ensure these shelters are stocked with emergency supplies, such as food, water, and first aid kits. Plan for transportation to move workers to safe locations if necessary.
- Review contents and placement of first aid kits and personal protective equipment, including waterproof gear and life vests as needed.
- Ensure sufficient fuel is available for backup generators to power critical equipment such as communication systems and pumps. Test emergency generators annually.
- Consider creating an emergency response equipment cache containing chain saws with replacement parts, gasoline powered pumps, food and water, etc.
- Coordinate with local authorities and emergency services for support and assistance.
- Communicate with neighboring communities and facilities to coordinate response efforts.
- Conduct regular drills and exercises to test preparedness and response capabilities.

Response to Severe Weather Events

The Canadian Hurricane Centre issues a series of escalating tropical storm and hurricane alerts, the most severe of which is a hurricane warning; a public announcement that one or both of the following dangerous effects of a hurricane are expected in a specific geographic area in 24 hours or less: (1) average sustained winds of at least 119 km/h; (2) dangerously high-water levels, or a combination of dangerously high water levels and exceptionally high waves. This can happen even if expected winds are less than hurricane force. A hurricane also brings the threat of local flooding from heavy rainfall.

Consider the necessity of undertaking the following actions in preparation for in impending severe weather event:

Securing Equipment and Infrastructure

- Machinery Shutdown: Shut down and secure all machinery and electrical equipment to prevent damage from flooding or high winds.

- **Storage of Materials:** Move or secure loose materials to prevent them from being washed away or becoming projectiles. Use waterproof covers or tarps to protect sensitive machinery from rain and saltwater exposure.
- **Reinforce Structures:** Reinforce structures or buildings to withstand high winds and heavy rain. Secure any floating equipment, such as barges, to prevent them from breaking loose.
- **Anchor Mobile Equipment:** Ensure that mobile equipment, such as trucks, loaders, and cranes are properly anchored or moved to higher ground to prevent them from being swept away or damaged by high winds or flooding.
- **Electrical Safety:** Disconnect and secure power supplies to avoid electrical hazards during and after the storm. Ensure that all electrical connections are above potential flood levels.

Flood and Erosion Control

- **Temporary Flood Barriers:** Use sandbags to construct temporary flood walls or levees around critical areas to protect against rising water levels.
- **Drainage Management:** Ensure that drainage channels, culverts, and stormwater systems are clear of debris and functioning efficiently to handle increased water flow.
- **Sump Pumps:** Install sump pumps in low-lying areas prone to flooding, ensuring they are operational and have backup power supplies in case of an outage.
- **Erosion Control Blankets:** Deploy erosion control blankets on slopes and embankments to reduce soil erosion caused by heavy rains.
- **Stormwater Management:** draw down stormwater ponds to provide additional freeboard to accommodate heavy rains.

Environmental Protection

- **Spill Prevention:** Secure all fuel, lubricants, and chemicals to prevent spills. If feasible, move these materials to higher ground.
- **Containment Measures:** Have spill containment measures and equipment on standby to respond quickly in case of leaks or spills.
- **Debris Management:** inspect and secure trash containers, scrap wood piles, and recycling bins.

Earthquake Response Procedures

Alarm: During the alarm phase of the earthquake the phrase “Earthquake – Take cover” will be sounded over the radio.

Earthquake Response

1. Immediate Actions During an Earthquake

- **Drop, Cover, and Hold On:** Instruct all personnel to immediately drop to the ground, take cover under sturdy furniture or against an interior wall, and hold on until the shaking stops. If outdoors, move away from buildings, utility wires, and heavy equipment.
- **Stay Clear of Hazardous Areas:** Workers should avoid areas where there is a risk of falling objects, landslides, or being struck by moving machinery.
- **Shut Down Equipment:** If safe to do so, operators should shut down machinery and electrical equipment to prevent accidents and reduce the risk of fire.

2. Post-Earthquake Assessment and Actions

- **Roll Call:** All mine rescue captains; supervisors or managers will complete a roll call for their crews at each muster point. The Mine Manager or his/her designee will be responsible for reviewing the contractor sign in sheet and accounting for the names on the sign in list.
- **Evacuation if Necessary:** Once the shaking stops, assess the situation. If there is a risk of aftershocks, structural damage, or landslides, evacuate the area immediately to a pre-designated safe assembly point away from coastal areas and unstable terrain.
- **Damage Assessment:** Conduct a rapid assessment of the quarry for structural damage, including cracks in buildings, instability in slopes, and potential landslides. Mark dangerous areas and restrict access.
- **Check for Fires and Gas Leaks:** Inspect the site for fires, gas leaks, or hazardous material spills. If any are found, evacuate the area and alert the appropriate emergency services.
- **Communication:** Establish communication with all employees to account for their safety and inform them of further instructions. Use radios or satellite phones if regular communication channels are disrupted.
- **First Aid:** Provide first aid to anyone injured and arrange for transportation to medical facilities if necessary.

Tsunami Warning Response Procedures

1. Immediate Actions Upon Receiving a Tsunami Warning

- **Immediate Evacuation:** Immediately evacuate all personnel from the quarry to higher ground. Do not wait for the wave to be visible; tsunamis can travel at high speeds and arrive within minutes.
- **Move to Designated Safe Areas:** Ensure all workers know the location of pre-designated safe assembly points located on higher ground, at least 30 meters (100 feet) above sea level or 3 kilometers (2 miles) inland.
- **Abandon Equipment:** Instruct workers to abandon all equipment and vehicles to save time during the evacuation. Human life is the priority.

2. Precautionary Measures Prior to the Tsunami Arrival

- **Shut Down Operations:** Shut down all quarry operations, including machinery, electrical systems, and any ongoing blasting activities.
- **Secure Hazardous Materials:** Securely store or move hazardous materials such as fuel, chemicals, and explosives to higher ground to prevent contamination in the event of flooding.
- **Communicate with Authorities:** Maintain communication with local emergency management authorities to receive updates and instructions.

3. Post-Tsunami Assessment and Actions

- **Wait for All-Clear Signal:** Do not return to the quarry until authorities have issued an official all-clear signal, as multiple waves can follow the initial one.
- **Damage and Environmental Assessment:** After returning, assess the quarry for damage, especially to coastal infrastructure, and look for signs of erosion, flooding, or contamination.
- **Check for Missing Personnel:** Account for all employees. If anyone is missing, immediately inform search and rescue teams.
- **Environmental Protection:** Evaluate the environmental impact, including any potential spills or contamination, and take necessary actions to mitigate the impact on marine and coastal environments.
- **Restoration and Clean-Up:** Begin clean-up operations, focusing on restoring essential services, securing damaged structures, and removing debris.

9. Unanticipated Discovery

In addition to the above-listed hazardous situations, situations may also arise which do not constitute an emergency, but which may require a contingency plan in the event of their occurrence. These include:

1. Discovery of heritage or archaeological resources.
2. Discovery of human remains.
3. Discovery of historical contamination.

1. Discovery of Heritage or Archaeological Resources

In the event of the discovery of a previously unidentified historic or prehistoric artifact, or archaeological site, the following procedures shall be followed:

1. Suspend work in the area and immediately inform the Mine Manager of the discovery.
 - a. Mine Manager or delegate will contact the Coordinator of Special Places, to notify them of the discovery and determine a suitable method of mitigation.
 - b. Mine Manager or delegate will contact the Kwilmu'kw Maw-klusuaqn (KMK) Archaeological Research Division's (ARD's) Senior Archaeologist to notify them of the discovery (regardless of whether the discovery is Mi'kmaq in nature).

2. To ensure protection of the discovery, flag off the site and establish an appropriate buffer zone.
3. Prevent personnel from accessing the site unless permitted to do so by the Mine Manager or designate.
4. Take all reasonable precautions to prevent any removal of, or damage to, the discovered articles until assessed by trained professionals.
5. Follow any instructions or direction provided by the Coordinator of Special Places and/or KMK ARD Senior Archaeologist, as applicable.
6. Do not resume work until authorization has been given by the appropriate authorities and written instructions are provided by the Mine Manager.
7. The Mine Manager, or delegate, will be responsible for completion of an Incident Report Form (**Appendix A**) to document the discovery.

Relics, antiquities, and items of historical or scientific interest remain the property of the Minister.

2. Discovery of Human Remains

In the event of the discovery of human remains or a burial site, the following procedures will be followed:

1. Suspend work in the area and immediately inform the Mine Manager of the discovery.
 - a. Mine Manager, or delegate, will contact the **Guysborough RCMP detachment at 902-533-3801** or the Canso RCMP at 902-366-2240.
 - b. If it is determined that the remains belong to a historic burial, the Mine Manager or delegate will contact the Coordinator of Special Places, and other regulatory contacts, as necessary.
 - c. Mine Manager or delegate will contact the KMK ARD's Senior Archaeologist to notify them of the discovery; this contact will respect KMK's *Ancestral Remains Protocols*.
2. Secure the site, including equipment involved in the discovery, by tagging out equipment and flagging (or another appropriate method) off the area.
 - a. If remains are found while using heavy equipment then the equipment shall not be moved, as physical evidence may be destroyed.
3. Carefully and respectfully cover the discovery with a tarp.
4. Do not resume work or move flagged equipment until authorization has been given as per the *Cemeteries and Monuments Protection Act (1998)* and written instructions are provided by the Mine Manager.
5. The Mine Manager, or delegate, will be responsible for the completion of an Incident Report Form (Appendix A) to document the discovery.

3. Discovery of Historical Contamination

In the event that potentially contaminated material (i.e., unusual odour, colouration, or appearance) is encountered during the course of work activities (e.g., excavation), the following procedure will be followed:

1. Suspend work in the area and immediately inform the Mine Manger of the discovery.
2. Depending on the nature of the discovery, the Mine Manager will contact the appropriate regulatory authorities to notify them of the discovery of released material.
3. Flag off the site and establish an appropriate buffer zone.
4. Prevent personnel from accessing the site unless permitted to do so by the Mine Manager.
5. The potentially contaminated area will be investigated to determine the nature of the contamination and to assess if worker safety or environmental impacts will occur if excavation continues. This assessment may be conducted by an on or off-site specialist, as deemed appropriate.
6. Once information regarding the contaminant is known, the on or off-site specialist will direct cleanup and assessment activities within the contaminated area.
7. Do not resume work in the area until authorization has been given by the Mine Manager, site specialist and/or regulatory authorities if/as applicable.
8. Mine Manager or delegate will be responsible for completing an Incident Report Form to document the discovery.

Appendix B Staff Roles and Responsibilities

Staff Roles and Responsibilities

A. Mine Manager or Designate (if the Mine Manager is off-site when event occurred)

1. Report to the Incident Control Centre at the mine site.
2. Obtain briefing from the most senior official and consult with the advisory committee.
3. Designate, or assume command, as the Response Commander.
4. Confirm resource personnel contracts and activate other plans of action as necessary.
5. Take charge of the deployment effort.
6. Confirm arrival and assignment of emergency operations personnel.
7. Confirm availability of personnel in the rotation schedules.
8. Consult with task coordinators from technical/safeguarding and surface support divisions.
9. Develop a plan of action and assign mine rescue teams and other operations personnel appropriate to the situation.
10. Obtain outside assistance or equipment, as required.

B. Response Commander's Duties

General

1. Activate and report to the Incident Control Centre at the mine site.
2. Assure removal of people affected by the incident.
3. Get briefing from person in charge.
4. Confirm all resource personnel contacts. Assign an individual to phone/contact
 - a. operations personnel not previously contacted.
5. Assume command of the emergency operation if Mine Manager is not on site.
6. Confirm plans for security, emergency medical services and transportation.
7. Confirm security at affected areas.
8. Consult with advisory committee members about conditions in the affected area.
9. Confirm Incident Control Centre arrangements and preparations. Assign persons responsible to keep:
 - the activity log, and
 - the emergency communications log.
10. Assign persons to act as messengers and runners.
11. Withdraw personnel not directly involved in the emergency operation.

Logistics

1. Record all conversations, delegations, pictures taken of white board notes and flip chart notes
2. Download all pictures of notes and print off for distribution to all in Incident Control Center

First Aid Duties

1. Notify a doctor about the emergency (where applicable).
2. Notify ambulance and mobilize, if required.
3. Prepare first aid facilities to receive and treat casualties.
4. Prepare emergency responder kits, if required.
5. Consult with doctor for obtaining:
 - a) nurse and/or Emergency Health Services Paramedics.
 - b) additional medical equipment; and
 - c) adequate ambulances and transportation (medivac).
6. Confirm arrangements with the Incident Control Center for additional first aid supplies.

C. Supervisor in Charge of Crews at Time of Emergency Duties (where senior official unavailable)

1. Implement emergency response plan.
2. Check to what extent the supervisor in the affected area has been able to comply with instructions from the Incident Control Center.
3. Notify personnel nominated for specific duties under the emergency plan.
4. Keep a record of events until the arrival of the operations log recorder.
5. Establish and maintain communications with the senior on-site official and the supervisor in charge of the affected area.
6. When necessary:
 - a. Instruct employee deployment office to terminate normal checking system and initiate emergency check control (upon receipt of authorization only)
 - b. Instruct supervisor to allow only authorized personnel into affected area.

D. Emergency Response Plan Coordinator Duties

The Emergency Response Plan Coordinator's role is to assure the evacuation procedure is activated when required, and that trained rescue teams, technicians and all special equipment are quickly and continuously available.

1. Assure the evacuation procedure is activated.
2. Assure security is notified.
3. Notify and mobilize fire and rescue organizations.
4. Schedule successive rescue teams and technicians.
5. Assure first aid and ambulance capability.
6. Keep a log of activities by time and event.

E. Internal Communication (Telephone Operator) Duties

1. The telephone or dispatcher's basic role in an emergency is to rapidly notify key personnel about the incident and to place calls and orders as directed by the Incident Control Centre Director. Specifically:
2. Inform the Mine Manager or alternate, about the circumstances.
3. Notify the Safety Supervisor.
4. Notify senior official and have emergency notification plan readily available for reference.
5. Keep a log of all calls and activities by time and event.
6. Write and read back all messages to the Incident Control Centre.
7. If an individual is out, ask the person taking the call to write the message and to notify the individual as quickly as possible.
8. So far as is possible, do not tie up the telephone lines; write messages and request assistance for delivery messages from the Incident Control Centre.
9. Place emergency calls as directed.

F. Security Duties

Security's role in an emergency is to permit access to the site of the incident by permitting access to authorized personnel only specifically:

1. Instruct security personnel to report to the incident area.
2. Ensure that all personnel coming into site Sign In/Out (must be tracked.)
3. Limit access to the incident area to authorized personnel only.
4. Provide radio communications as required.
5. Obtain assistance from local law enforcement agencies as required.
6. Provide other security control as required.
7. Keep a log of activities by time and event.

Appendix C

C1: Mine Map and Emergency Response Equipment Locations

C2: List of Emergency Response Equipment

C1: Example Mine Map and Emergency Response Equipment Locations



C2: List of Emergency Response Equipment

(example – to be updated)

Black Point Aggregates Inc.	
<ul style="list-style-type: none"> Medical & First Aid Equipment & Training 	<p>As stipulated in the Nova Scotia Occupational Health and Safety Regulations:</p> <ul style="list-style-type: none"> First Aid Kits Emergency Medical Response Equipment (splints, eye wash stations, etc.) Communication devices Signage indicating equipment availability
<ul style="list-style-type: none"> Fire Fighting Resources: To relinquish firefighting to local fire department upon their arrival. 	<ul style="list-style-type: none"> 40+ ABC fire extinguishers on site 1, rolling Ansul dry chemical extinguisher 30-A, 160-B:C 1, 2000-gallon water truck with pumping capacity. Water standpipes around office, shop & plant operations 200ft 1”1/2 fire hose
<ul style="list-style-type: none"> Confined Space Resources 	<ul style="list-style-type: none"> 3 MSA gas Monitors plus vacuum pump CS Fans Rescue Tripod 8 Self Contained Breathing Apparatus with spare bottles
<ul style="list-style-type: none"> Rope Rescue (sufficient to lift patient and rescuer) 	<ul style="list-style-type: none"> Carabiners, Single Pulleys, Double Pulleys, Figure 8’s, Small & Large Break Bars, Harnesses, Lanyards, Man basket plus Rescue Ropes.
<ul style="list-style-type: none"> Spill Response 	<ul style="list-style-type: none"> Spill kits distributed on worksite
<ul style="list-style-type: none"> Water Rescue 	<ul style="list-style-type: none"> Flat bottom Jon Boat Life Jackets/Immersion Suits supplied to workers Life rings situated at water hazards DanBouy rescue devices on marine dock.
<ul style="list-style-type: none"> Heavy Rescue 	<ul style="list-style-type: none"> Excavators, Loaders, Dozers, Tele handler, Man lift, Full maintenance shop: Chain falls, slings, lift tools, cutting tools, heavy hydraulics, etc.

Appendix D Incident Report Form (IRF)

Incident Report Form (IDF)

Date and Time of Incident: []

Location of Incident: [Include specific quarry area and coordinates if applicable]

Description of Incident:

[Provide a detailed description of what happened, including any contributing factors, equipment involved, and individuals affected.]

Injuries or Damage:

[List any injuries sustained by personnel, including severity. Also, detail any damage to equipment, infrastructure, or the environment.]

Witnesses:

[List names and contact information of any witnesses to the incident.]

Immediate Actions Taken:

[Describe any immediate actions taken to address the incident, such as medical treatment, equipment shutdown, or evacuation procedures.]

Root Cause Analysis:

[Conduct a preliminary analysis of the root cause(s) of the incident. Identify any underlying issues or factors that contributed to the event.]

Preventive Measures:

[Recommend any preventive measures or corrective actions to mitigate the risk of similar incidents in the future.]

Recommendations:

[Provide any additional recommendations or suggestions for improving safety protocols or procedures at the mine site.]

Reported By:

[Name of person filling out the form]

Date and Time Reported:

[]

Supervisor's Signature:

[Signature of supervisor or authorized personnel confirming the accuracy of the report.]

Date and Time of Supervisor's Signature:

[]

Additional Comments:

[Indicate whether the incident was Level 1, 2 or 3]

[Include any additional comments or information relevant to the incident.]