Back River Project
Spill Contingency Plan
George Lake Camp

December 2009

Table of Contents

1.0 INTRODUCTION

1.1 Plan Purpose

Sabina Gold & Silver Corp. (Sabina) is actively exploring the Back River property mineral rights (encompassing the primary exploration camp at Goose Lake, as well as a satellite camp at George Lake and unoccupied claim groups at Boot Lake, Boulder Pond, Wishbone and Del Lake; Figure 1). Advanced exploration programs have been carried out in previous years. Similar activities are anticipated in 2010 and beyond as Sabina continues to advance the project.

The Back River exploration project is located in western Nunavut, south of Bathurst Inlet within the Slave Structural Province. It lies approximately 525 kilometres northeast of Yellowknife and 400 kilometres south of Cambridge Bay, NU. The project area is within the zone of continuous permafrost, and is represented on National Topographic System 1:250,000 scale map sheets 76F, 76G, 76J, and 76K. Coordinates for the camps are as follows:

- Goose Lake 65º32’ north 106º25’ west
- George Lake 65º55’ north 107º27’ west

This document is a review and analysis of the preparedness for events which may occur due to unforeseen circumstances. The plans and predetermined lines of response detail actions to be taken in the event of unintentional materials release during the ongoing exploration program. This report addresses the George Lake camp and associated exploration programs including wastewater, sewage treatment, fuel and chemical storage.. The plan will be updated yearly and would address any significant changes in operating plans, should they occur.

This contingency plan is a living document, and will be amended as required to accommodate change. It first describes the main facilities to be operated as a component of the ongoing exploration drilling programs, followed by contingency measures to support them. On site activity is planned to run from approximately March to September of each year, due mainly to access limitations. Should operations extend beyond these times, and if operational scenarios change, notification will be made to the appropriate agency.

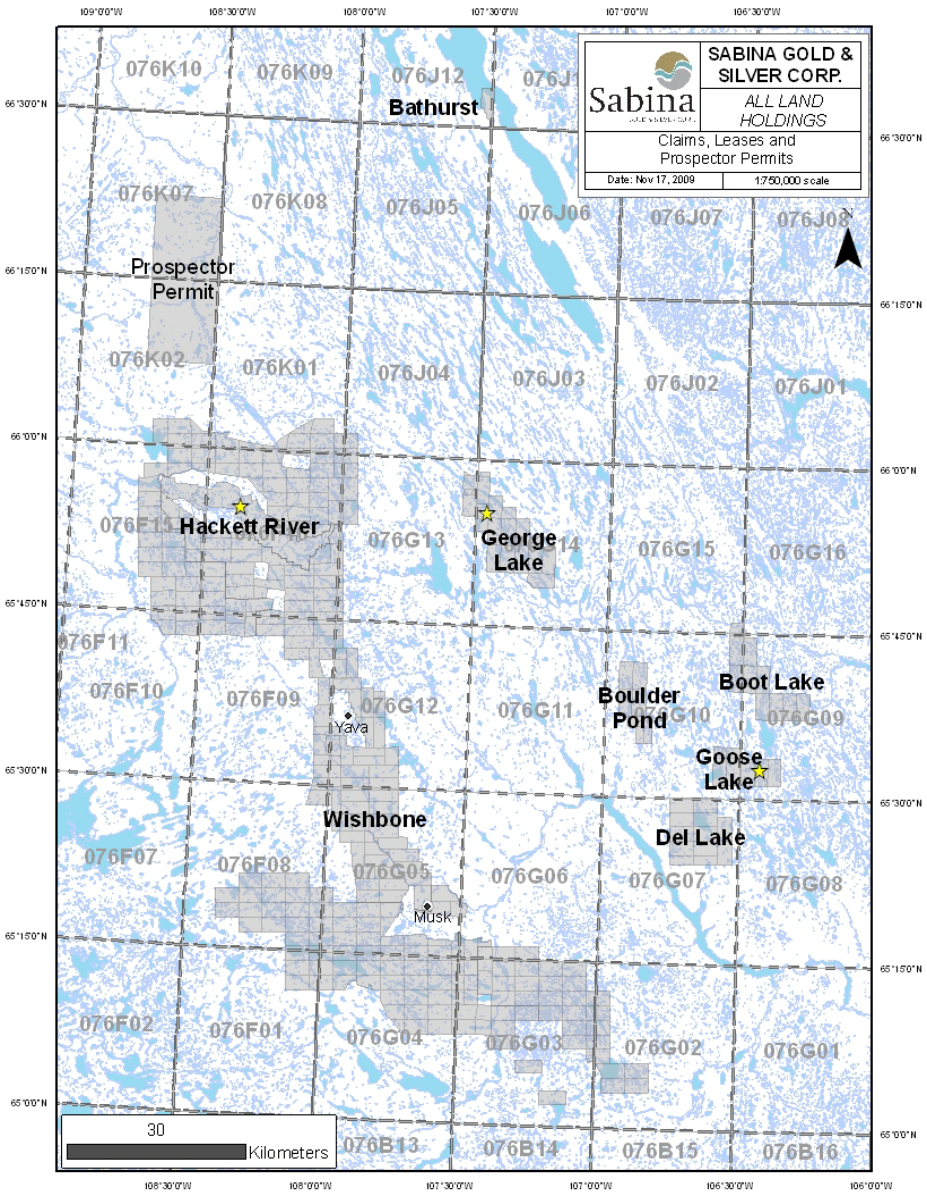

Figure 1. Location map of the Sabina's exploration properties, western Nunavut.

1.2 Sabina Social and Environmental Policy

Sabina Silver Corporation is committed to environmentally responsible and socially acceptable exploration and mining practices. We are dedicated to creating and maintaining a safe environment for both the land we occupy and the people that drive its success. The company's philosophy is to conduct its operations to protect not only the environment, but the health and safety of its employees and the public as well.

Sabina also subscribes to the principles of sustainable development in mining. While exploration and mining cannot occur without an impact on the surrounding natural environment and communities, our responsibility is to limit negative environmental and social impacts and to enhance positive impacts.

To achieve these goals, Sabina is committed to:

- Seeking to be environmental leaders in the mining community by integrating responsible environmental management as an essential component of all business decisions;
- Comply with all applicable laws, regulations and standards; uphold the spirit of the law and where laws do not adequately protect the environment, apply standards that minimize any adverse environmental impacts resulting from its operations;
- Communicate openly with employees, the regulatory community and the public on environmental issues and address concerns pertaining to potential hazards and impacts;
- Assess the potential affects of operations and integrate protective measures into the planning process to prevent or reduce impacts to the environment and on public health and safety;
- Take appropriate corrective actions should unexpected environmental impacts occur. This will also include taking appropriate action to prevent reoccurrence of these impacts.
- Provide adequate resources, personnel and training so that all employees are aware of and able to support implementation of the environmental and social policy;
- Conduct and support research and programs that improve understanding of the local environment, conserve resources, minimize waste, improve processes, and protect the environment.
- Working with the appropriate local regulators and agencies, maximize benefits to the affected communities and residents;
- Balance all decisions with best management practices, scientific principles and traditional knowledge.

1.3 Sabina Policy on Initiation for Cleanup activities

Sabina initiates clean up activity when, in the opinion of management, Sabina is clearly associated, or likely associated with the spilled product. The guiding principles of Sabina's Spill Contingency Plan is to comply with existing regulations to ensure protection of the environment, and to keep employees, government officials and the public aware of our plans.

1.4 Risk Management

The likelihood of a spill incident happening at Back River at either the Goose Lake or George Lake tank farms is very low, due to the double-walled tanks contained in the lined, bermed area, and the prescribed procedures for fuel transfer and anti-siphon devices in the tanks.

The greatest hazards associated with drummed fuel include rupture of drums during movement of heavy equipment around the property or leaks during storage. The first risk can be mitigated through proper operator training of equipment operation, clear marking and segregation of fuel supplies and heightened operator awareness when working near fuel supplies. The second risk is easily mitigated with secondary containment and frequent inspection of the drums (carried out during regular yard duties). Additional hazards are present during refuelling operations (mitigated with drip trays and absorbent mat), and during local drum movement (e.g. from storage to helipads), which is mitigated by using experienced operators, carefully securing the drums to the loader during movement, and safe driving practices.

As salt is delivered in pelletized form, any spill is easily cleaned up. Regular inspection of the storage area will allow for rapid detection of any spill.

Frequent inspections of the greywater line will turn up any leaks in the system which can be quickly repaired. Any issues would likely be noticed by most people in camp as either moisture and/or an odour.

The likelihood of drill additives entering a water body is extremely small. With the exception of on-ice drilling, drills are located at least 31 m above the high water mark of lakes, ponds and streams, with vegetation and overburden material providing an effective mechanical barrier to the transport of materials

to the water body. As an added mitigation measure, geo-textile cloth fences are constructed on the downhill side of all new drill setups. For on-ice drilling, excess return water is pumped to a point on shore more than 31 m from the estimated high water mark (difficult to determine conclusively due to snow cover). Snow and lake ice also create an effective barrier and containment mechanism to spills of material at the drill site, allowing for easy cleanup. Drill sites are inspected for cleanliness upon completion of the hole.

Despite the mitigation measures taken, should any incident arise as a result of human error or unforeseen circumstances, the operating procedures outlined in this document will be implemented.

2.0 PROJECT FACILITY DESCRIPTION

2.1 Existing Facilities

The George Lake camp is located on the western shore of George Lake (Figure 2) and consists of an approximate 10-person satellite/emergency camp, used primarily for short periods of supply restocking in the spring and emergency use throughout the season. Camp facilities consist of 5 weatherhaven structures for sleeping and living quarters and a large Quonset hut for vehicle maintenance and storage. These facilities are located on the eastern side of an esker which has been partially leveled for use as an airstrip. The lakeshore is approximately 60 m to the east of the camp buildings. A lined, bermed bulk fuel storage area is located approximately 100 m off the northwest end of the airstrip.

2.2 Domestic Greywater and Sewage

As an emergency camp/staging area, the George Lake camp has a single Pacto for disposal of human waste. The waste bags are securely enclosed in garbage bags and transported to Goose Lake for incineration. Greywater discharge is not an issue as the shower and kitchen facilities will not be actively used.

2.3 Solid Waste

Combustible solid wastes generated from the camp activities will be transported to Goose Lake for incineration. An incinerator was installed at the Goose Lake camp to handle day-to-day waste; products such as putrescible domestic and office waste are burned. Non combustible waste such as scrap metal, non-reusable barrels, incinerator ash, etc., are removed from site using flights to Yellowknife.

Although the potential for waste rock (including drill core) currently stored at George Lake core storage or Goose Lake core storage to be acid producing is unlikely, any such waste would be disposed of in an approved location and under acceptable practices. Preliminary ARD studies indicate a low likelihood of acid generation.

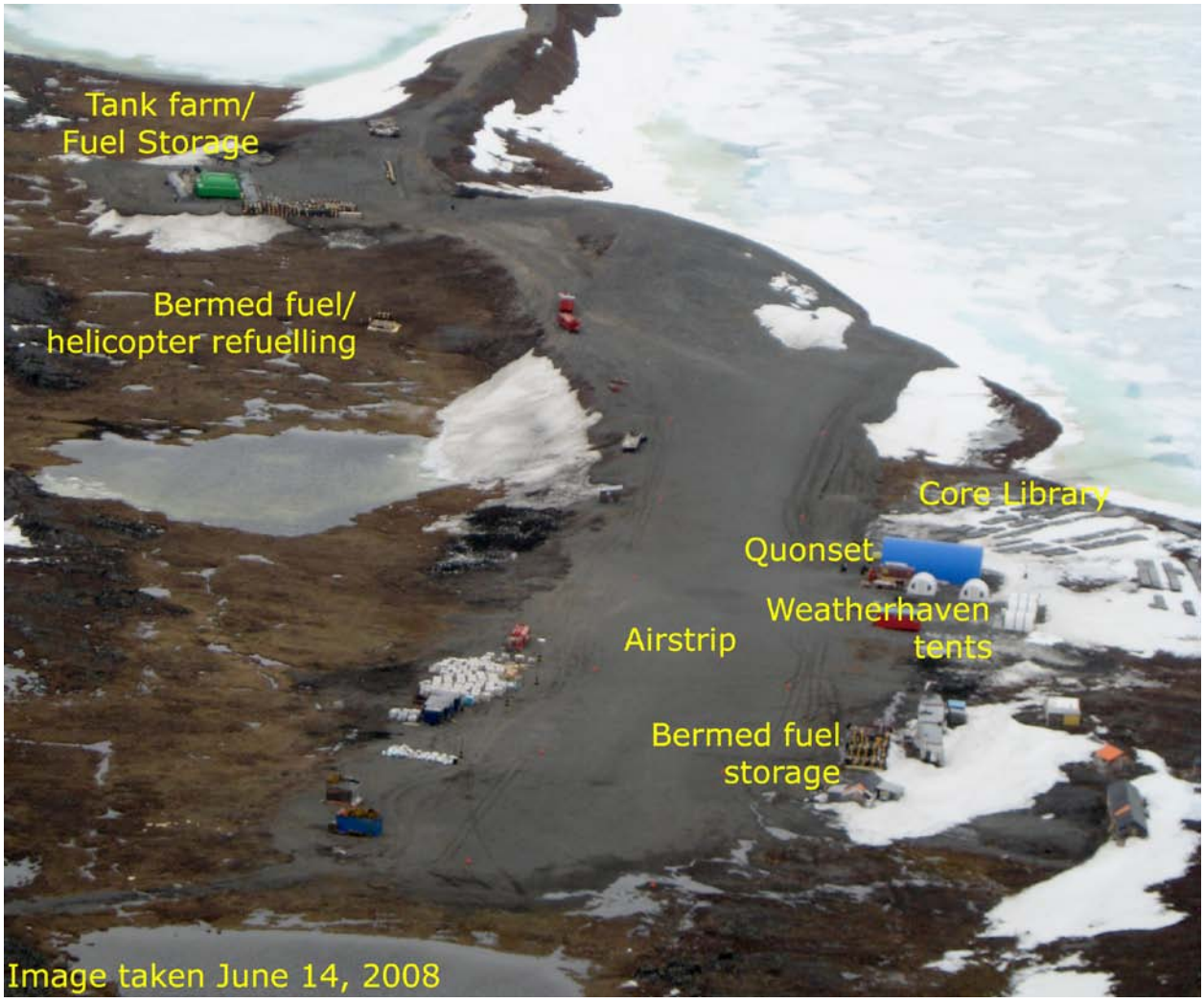

Figure 2. Aerial imagery of the George Lake camp.

2.4 Fuel Storage

Diesel fuel is required to generate power on-site, heat buildings and to fuel mobile equipment. At George Lake, the diesel fuel storage for the continuing exploration program consists of 205L drums as well as two 70,000L ULC double walled envirotanks contained within a lined, bermed tank storage area. The majority of drummed fuel is contained within self-supporting artificial berms. Additional secondary containment will be ordered or constructed as needed. Initial 2010 supplies for each camp are as follows:

Fuel	**Goose Lake**	**George Lake**
Diesel – Envirotanks*	83,000 L	39,000 L
Diesel – 205 L drums*	9 drums	5 drums
Jet fuel – 205 L drums*	71 drums	0 drums
Gasoline	12 drums	1 drum
AvGas – 205 L drums	18 drums	3 drums
Propane – 1000# cylinders	1 @ 30%	1 @ 80%
Propane – 250# cylinders	1 @ 80%, 1 @ 40%	0
Propane – 100# cylinders	3	91

These quantities are taken from the 2009 year-end inventory. Supplies will be replenished in 2010 with quantities dependent on the scope of the program which has not yet been determined. Inventories of fuel at each site are dynamic and dependant on exploration activities and personnel in camp.

Drummed fuel is required to support drilling and helicopter activities outside of camp and strategically relocated as required. All drums are located at least 30 metres above the high water mark of any water body to a maximum volume of 4000 L in each cache. Specialized oils and greases used by the drilling contractors are stored in sheds or sea-cans designated for that purpose.

2.5 Chemicals

Sabina is committed to the safe and proper handling of waste materials to ensure minimal environmental impact and land disturbance. Waste chemicals that require special attention and handling are waste oil, hydraulic oil, lubricating oil, calcium hypochlorite, grease, explosives and ethylene glycol.

As there will be minimal use of the George Lake camp in 2010, it is anticipated that only small quantities of waste oil, hydraulic oil, filters, &c. will be generated. This material will be stored in empty drums, marked appropriately, and stored for backhaul and disposal at an appropriate site.

Calcium chloride is added to the fresh water to form a brine solution that acts as antifreeze when drilling in permafrost conditions. The drilling return water is reheated and reused using a mega-bag system which catches the drill cuttings as well.

Sabina will not use explosives during the 2010 exploration season. Explosive products, when/if on-site, will be stored in appropriate facilities at designated explosives storage site(s).

Small quantities of various household chemicals are on site for domestic use.

Material Safety Data Sheets (MSDS) will be collected and kept at the site for all chemicals and fuel products. Appropriate storage and handling of these products will be undertaken. The action plans for spills of diesel fuel and ethylene glycol are also included at the end of this report, as well as a copy of the NWT-NU Spill Report.

3.0 SYSTEM FAILURE AND PREVENTATIVE MEASURES

3.1 Domestic Sewage and Waste

Waste from the kitchen and Pacto systems at Goose Lake are carried to the incinerator in a small trailer, with virtually no risk of spillage. The greywater lines are routinely inspected for leaks and repaired as necessary. The screens at the greywater sump are cleaned of debris daily.

3.2 Solid Waste

Failures may occur in the handling of solid waste in the following modes:

- Incinerator at Goose Lake fails;
- Accidental damage to the incinerator and it components, or the heaters and/or their fuel supplies;
- Mechanical breakdown;
- Improper maintenance.

Visual inspection of the incinerator and its combustion products will be carried out frequently, typically in the normal course of operation. The incinerator will be operated according to the manufacturer's instructions.

3.3 Fuel

Fuel spills could potentially occur from:

- Fuel storage containment (tanks, barrels) leaks;
- Spills during drum transport from aircraft to fuel storage area;
- Spills from vehicles or equipment as a result of accidents;
- Spills during fuel transfer from barrels to equipment or heaters.

Spills occurring during fuel handling, transfer or storage operations will be minimized by:

- Secondary containment;
- Proper storage of barrels;
- Inspections of the storage facilities and barrels;
- Inventory tracking;
- Staff training in proper fuel handling procedures;
- Spill response training for personnel associated with fuel handling;
- Immediate cleanup of minor spills;
- Enclosing spigots on fuel containers with absorbent mat to collect any slow drips.

The potential for spills affecting surface waters is low, as fuel storage and transfer points are located away from watercourses and lakes. Close inspection of fuel transfer activities will be undertaken during all times while fuel is being pumped/transferred to equipment. Secondary containment will be used at all refuelling points and storage areas.

3.4 Chemicals

Any chemicals brought on site are stored in manufacturers' approved packaging. Although unlikely, leaks may occur resulting in minor spills of chemical product in storage. It is more likely a leak will occur during the transfer of chemicals or from accidental failure of containers.

Sabina provides training to its staff in product handling and inspection procedures, which we feel, will result in reduced occurrences of chemical spills.

4.0 INITIAL ACTIONS

In the event of any leak, spill or system failure, steps taken by company personnel at the spill site are as follows:

- Be alert, ensure your safety and the safety of others first;
- Assess the hazard to persons in the vicinity of the spill or leak;
- Assess nature and status of the spill, leak or system failure and measures to be taken to bring the situation under control;
- When safe to do so, stop the flow of the spilled material;
- Report the spill or leak of container immediately to the Environmental Coordinator or Site Superintendent so they can ensure the appropriate notification is made:
  - ❖ NWT/NU 24-hour spill reporting line (867) 920-8130
  - ❖ Peter Kusugak at INAC (867) 975-4295
  - ❖ 24-hour Emergencies Pager (867) 222-1984
- Resume safe, effective actions to contain, stop the flow of spilled product or clean up the incident; and

- Record all information on the status of the situation. Take photographs of the site (if possible) before the clean up and after the clean up has been completed.

5.0 SYSTEM MALFUNTION RESPONSES

5.1 Fuel Spill

Detection of leaks will be using two methods - a fuel inventory reconciliation and inspection. A weekly reconciliation of storage volumes will be completed and a spill response will be initiated in the event of any unexplained loss over five or more weeks.

Weekly inspections will be conducted to ensure either there has not been a leak or that the conditions of the area could result in a leak. These inspections will include the fuel drums and storage containers, secondary containment sumps and associated spill containment devices, any pumps and product-handling equipment, and an overfill protection devices. These inspections will be recorded to include who completed the inspections, areas included in the visual inspection and any deficiencies noted.

Fuel spills or leaks at storage facilities or vehicles will be handled by following these steps:

- Identify the source of the leak or spill;
- Contact the Environmental Coordinator/Site Superintendent
- Stop leaks from tank or barrel by:
  - ❖ Turning off valves;
  - ❖ Utilizing patching kits to seal leaks;
- Placing plastic sheeting at the foot of the tank or barrel to prevent seepage into the ground; and
- Contain the spill and the source if possible;
- Take photographs of the spill site before and after the clean up.

Further information on the handling of fuel spills is detailed in section 10 of this report.

5.1.1 Fuel Spills on Land

Fuel spills on land (gravel, rock, soil, vegetation) can be contained by:

- Constructing temporary berms and deploying absorbents;
- Stains on rock can be soaked up with absorbent mats. The mats should be placed in empty drums for storage prior to incineration.

Contaminated soil and vegetation will be collected and stored in empty drums for backhaul and disposal at an approved facility.

5.1.2 Fuel Spills on Snow

Snow can be an effective natural absorbent for spilled fuel:

- Temporary berms can be made from snow by compacting it and spraying with water to create an ice barrier or lining the snow with plastic;
- The snow-fuel mixture can be scraped up and stored in a lined area or in drums for future disposal; and
- Mark or stake the area affected by the spill so that the site can be revisited and re-evaluated once the snow has melted.

5.1.3 Fuel Spills in Waterways or on Lakes

All spills into waterways (streams or lakes), regardless of the amount, MUST be reported to:

- NWT/NU 24-hour spill reporting line (867) 920-8130
- Peter Kusugak at INAC (867) 975-4295
- 24-hour Emergencies Pager (867) 222-1984

It is important to immediately limit the area of the spill on water. Booms can be drawn in to encircle spilled fuel. The absorbent mats are hydrophobic (absorbs hydrocarbons and repel water).

- Deploy booms to contain the spill area. Boom effectiveness will be limited by winds, waves and other factors; and
- Use absorbent mats and similar materials to capture small spills on water.

5.1.4 Fuel Spills on Ice

Where a spill occurs on ice, snow can be compacted around the edge of the spill to serve as a berm. The ice provides a good barrier to any seepage of fuel into the water, but the contaminated snow/ice must be scraped up as soon as possible.

Permission may be given from the government to burn off fuel on the ice – contact Jim Noble or the 24-hour Emergencies Pager prior to burning. Remaining contaminated snow can be placed in drums in a lined area (on land).

5.2 Chemical Spills

Assess the hazard of the spilled material by referring to the relevant MSDS sheet. The following general procedures may be followed:

- If the chemical is hazardous, ensure personnel protective equipment is appropriate utilized (latex gloves, eye protection, etc.) before approaching the spill;
- Use absorbent mats to soak up spilled liquids;
- Plastic sheeting can be utilized to prevent chemicals from being blown around;
- Neutralize acids or caustics; and
- Place spilled material, absorbents, and rags in an open-top drum for storage until ultimate disposal at an approved location.

6.0 RESPONSE EQUIPMENT

6.1 General Equipment

Heavy equipment used in exploration drilling operations will be available on-site for emergency use to respond to spill incidents. Helicopters and fixed-wing aircraft may also be available. Presently, the facilities are well equipped to respond to emergencies or spills.

6.2 Spill Kits

Complete spill kits are located as follows:

Goose Lake Camp		George Lake Camp	
Tank farm	Drummed fuel storage	Tank farm	Drummed fuel storage
Generator	Quonset	Generator	Quonset
Core shack	Drum crusher		
Incinerator	Helipad area		

The following Items are contained in each Spill Kit:

Quantity	Item
1	45 gal, 16 Gauge Open Top Drum, c/w Bolting Ring & gasket
1	48" x 48" x 1/16" Neoprene Pad (drain Stop);
20	Short Putty Epoxy Sticks
1	Splash Protective Goggles
1	Pkg. - Polyethylene Disposable Bags (5 ml) 10 per Package
1	Shovel (Spark Proof);
1	Case T-123" x 10' absorbent Boom, 4-Booms/Case;
1	Pkg. – Universal absorbent Mats, 16 ½" x 20", 100 Mats per Package
1	Roll – Oil only absorbent mats 150' x 33":

Each drill rig has a roll of absorbent mat in the event of small spills or drips. Should a larger spill occur, the spill response team will be mobilized with a complete spill kit as necessary.

Further, copies of this Spill Contingency Plan can be found in the kitchen at both George and Goose camps, the main office at Goose Lake, and at each drill rig.

6.3 Mobile Environmental Response Unit

A mobile Environmental Response Unit is believed to be available to Sabina from a major fuel supplier (Shell) in Yellowknife or Cambridge Bay (for phone number, see Contractors in Section 7). This unit can be transported to the site from Cambridge Bay in less than three hours weather permitting.

7.0 RESPONSE ORGANIZATION

7.1 Contact Information

For 2010 the members of the Back River Project Spill Response Team and their duties are listed below. Approximately 10 personnel will be available on-site to assist with spill response activities.

Field Contacts			
Environmental Coordinator	TBD	604-759-0601 604-759-0624	
Site Superintendant	Lorne Keith		lkeith@sabinagoldsilver.com
Site Manager	Doug Cater Cam Bartsch		dcater@sabinagoldsilver.com cbartsch@sabinagoldsilver.com

Additional assistance may be obtained as necessary from the following organizations:

Potential Back River Sabina Contractors		
Discovery Mining Services, Yellowknife	Rod Brown	(867) 920-4600
Shell Canada, Mobile Environmental Response	Steve Bassett	(867) 874-2562
Drill Contractor-Bradley Bros.	Art Murdy	(819) 797-0755
Kitnuna	Wilf Wilcox	(867) 983-2331
Nuna Logistics Ltd.	Court Smith, John Zigarlick	(867) 682-4667

Potential Local Air Charter	
Air Tindi, Dispatch	(867) 669-8218
NWT Air (First Air), dispatch	(867) 669-6645
First Air Dispatch	(867) 669-6682
Great Slave Helicopters	(867) 873-2081
Summit Air	(867) 667-7327

Potential Equipment and Material Suppliers	
Dupont (Fuel Dye)	(905) 821-5660
Frontier Mining (Sorbents)	(867) 920-7617
Acklands (sorbents)	(867) 873-4100 (867) 920-5359

Other contacts which may be of some assistance:

Nunavut/NWT			
NWT Resources, Wildlife & Economic Development (RWED)	Environmental Protection Services		(867) 873-7654
	Philip Lee	Regional Superintendent	(867) 920-6134
	Grant Corey	Cambridge Bay	(867) 983-7315
Nunavut Department of the Environment, Iqaluit	Robert Eno	Director	(867) 975-5900
Workers Compensation Board, Yellowknife	Sylvester Wong	Director Prevention Services	(867) 669-4408
	Peter Bengts	Mine Safety	(867) 669-4412
Kitikmeot Inuit Association (KIA)	Geoff Clark	Director of Lands, Environment and Resources	(867) 982-3310
	Stanley Anablak	Senior Lands Administrator	
Nunavut Water Board	Dionne Filiatreault	Executive Director	(867) 360-6338
	Phyllis Beaulieu	Manager of Licensing	

Federal Government			
Environment Canada	Craig Broome	Manager of Enforcement	(867) 669-4730
	Wade Romanko	Environmental Emergencies Officer	(867) 669-4736
Indian & Northern Affairs Canada (INAC)	Melissa Joy Andrew Keim	Water Resources Officer	(867) 982-4308 (867) 975-4298
	Kevin Robertson	Resource Management Officer	(867) 975-4296
	Peter Kugusak	Manager of Field Operations	(867) 975-4295
Fisheries and Oceans	Margaret Keast		(867) 979-8000
RCMP (Yellowknife)			(867) 669-1111
RCMP (Cambridge Bay)			(867) 983-2111

7.2 Responsibilities

7.2.1 All Employees (First Responders):

- Identify the source of the spill;
- Assess the initial severity of the spill and any safety concerns;
- Report all spills immediately to Supervisor;
- Determine the size of the spill and stop or contain it, if possible;
- Participate in spill response as member of cleanup crew.

7.2.2 Emergency response Team (Spill Cleanup Crew):

- Conduct cleanup of spills under direction of Environmental Coordinator/Site Superintendent;
- Deploy boom, absorbent pads and other equipment and materials as required;
- Take appropriate measures;
- Continue cleanup as directed by Environmental Coordinator/Site Superintendent or until relieved.

7.2.3 Environmental Coordinator/Site Superintendent:

- Report spill to Project Manager;
- Obtain GPS coordinates for all spills;
- Obtain photographs of spill site before clean up starts if possible and after the cleanup has been completed. Take pictures of undisturbed area beside the spill area for a comparison. If spill occurs on snow, stake or otherwise identify the affected area so that it can be evaluated once the snow melts;
- Assist in initial and ongoing response efforts;
- Supervise emergency response team;
- With work crew, take initial action to remove the source and contain spill;
- Continue actions until relieved by other personnel;
- Decide with Environmental Coordinator/Site Superintendent if mobilization of additional equipment from a Spill Response Organization or Contractor is warranted;

7.2.4 Environmental Coordinator

- Reports spill to 24-hour Spill Reporting Line
- Contact the Emergency Response Team if required;
- Records the time of the report, source of information and details on location, size, type of spill and any other information and details on appropriate spill report form;
- Together with the Site Superintendant and Project Manager decide if additional equipment and manpower is required to contain and cleanup spills;
- Distribution of spill report;
- Ensures investigation and identifies measure to prevent similar spills;
- Liaise with NWT/NU applicable agencies regarding on-going cleanup activities;
- Co-ordinate inspections and spill closure by applicable agencies;
- Organizes spill response training and exercises;
- Updates and distributes Spill Contingency Plans.

7.2.5 Site Superintendent

- Ensures cleanup is completed to Sabina's objectives and standards;
- Provides update to Environmental Coordinator/Project Manager/Senior Project Geologist;
- Liaise with NWT applicable agencies regarding on-going cleanup activities;
- Conducts ongoing monitoring of cleanup operations leading to close-out;
- Ensures Emergency Response Team is adequately trained in spill response;
- Organizes spill response training and exercises.

7.2.6 Project Manager/Senior Project Geologist

- Provides advice, when requested, to the Senior Exploration Geologist, the On-Scene Coordinator, the Environmental Coordinator and the Site Superintendent on handling the spill situation;
- Assists in developing effective spill management and prevention practices; and
- Provides advice, when requested, to the On-Scene Coordinator, the Spill Cleanup Supervisor and the Site Superintendent on storage and disposal options.

7.2.7 Legal Counsel

Advises the Project Manager and the Senior Project Geologist on matters related to:

- Legislative authority of various government agencies;
- Questions of due diligence;
- Costs/fines and liabilities, including penalties associated with regulations; and
- Consults with the corporation coordinator and advises on matter related to insurance.

8.0 REPORTING PROCEDURES

Spills adjacent to or into a water body, shall be reported immediately regardless of quantity.

It is a regulatory requirement that all spills and leaks of gasoline or diesel fuel must be reported. Any leak or spill of any amount of these substances into a watercourse, water body or groundwater must be reported.

The spill response team and camp management must be notified immediately of any spill. Communication on-site will be via radio and other centers by satellite phone. The Environmental Coordinator/Site Superintendent or designate will ensure spills are reported as required and that the relevant form is filled out as completely as possible.

Any spill, or incident that may likely result in a spill, of an amount equal to or greater than the amount listed in the table below shall be promptly reported.

TDGA Class	Description of Contaminant	Amount Spilled
1	Explosives	Any amount
2.1	Compressed gas (flammable)	Any amount of gas from containers with a capacity greater than 100 litres
2.2	Compressed gas (non-corrosive, non flammable)	Any amount of gas from containers with a capacity greater than 100 litres
2.3	Compressed gas (toxic)	Any amount
2.4	Compressed gas (corrosive)	Any amount
3.1, 3.2, 3.3	Flammable liquid	100 litres**
4.1	Flammable solid	25 kg
4.2	Spontaneously combustible solids	25 kg
4.3	Water reactant solids	25 kg
5.1	Oxidizing substances	50 litres or 50 kg
5.2	Organic Peroxides	1 litre or 1 kg
6.1	Poisonous substances	5 litres or 5 kg
6.2	Infectious substances	Any amount
7	Radioactive	Any amount
8	Corrosive substances	5 litres or 5 kg
9.1 (in part)	Miscellaneous products or substances, excluding PCB mixtures	50 litres or 50 kg
9.2	Environmentally hazardous	1 litre or 1 kg
9.3	Dangerous wastes	5 litres or 5 kg
9.1 (in part)	PCB mixtures of 5 or more parts per million	0.5 litres or 0.5 kg
None	Other contaminants	100 litres or 100 kg

Spill reporting thresholds for potential contaminants

***It is the intention of Sabina to report all spills over 25 litres and to maintain an inventory of all spills less than 25 litres, which can be viewed by any inspector or agency representative*.

9.0 TRAINING AND SPILL EXCERCISES

9.1 Training

All members of the Spill Response Team will be made familiar with the spill response equipment, including location and access, the Spill Contingency Plan and appropriate spill response methodologies. While there is not a formal training program specific to this material, yard crew staff are made aware of this information as a result of training for their duties.

All Sabina personnel and contractors, including drilling contractors, will be made familiar with spill reporting requirements as part of the site orientation process.

Fuel handling crews will be fully trained in the safe operation of these facilities, spill prevention techniques and initial spill response. Similarly, the staff involved in wastewater treatment operations will be trained in the safe and effective operation of these facilities.

10.0 ACTION PLAN FOR SPILL OF DIESEL OR JET FUEL

Initial Spill Responses:

- STOP the flow if possible;
- CONTAIN flow of oil by dyking, barricading or blocking flow by any means available. Use earth moving equipment if practical;
- ELIMINATE, open flame ignition sources;
- If flow has reached any natural stream, mobilize team to deploy river boom, and sorbent booms;
- If possible, pump fuel into other appropriate tank/containers.

Hazards:

- Flammable
- Slightly toxic by ingestion, highly toxic if aspired

Action for Fire:

- Use carbon dioxide, dry chemical, foam, or water spray (fog), though water may spread the fire;
- Use fog streams to protect rescue teams and trapped people;
- Use water to cool surface of tanks;
- Divert the fuel to an open area and let it burn off under controlled conditions;
- If the fire is put out before all diesel is consumed, beware of re-ignition;
- Where diesel fuel is running downhill, try to contain it as quickly as possible; and
- Remove affected vehicles from the area as rubber tires are almost impossible to extinguish.

Recovery:

- Unburned diesel fuel can be soaked up by sand and peat moss, or by chemical sorbents such as Grabil or Conwed;
- If practical, contaminated soil should be excavated;
- Diesel fuel entering the ground should be recovered by digging sumps or trenches; and
- Diesel fuel on a water surface should be recovered by skimmers or sorbent booms. (See Section on Recovery of Oil Spills)

Disposal:

- Incineration under controlled conditions; and
- Burial at an approved site.

Properties:

- Chemical composition mixture of hydrocarbons in the range C9 to C18;

- Clear, oily liquid; and
- Not soluble, floats on water

Environmental Threat:
- Moderately toxic to fish and other aquatic organisms;
- Harmful to waterfowl; and
- May create visual film on water and shorelines.

Containers:
- Transported by appropriate methods to acceptable storage, (typically 205 litre drums);
- Bulk transportation and storage.

11.0 ACTION PLAN FOR ETHYLENE GLYCOL (ANTIFREEZE) SPILL

Initial Spill response:
- STOP the flow at source if possible;
- ELIMINATE open flame ignition sources;
- CONTAIN flow of liquid by dyking, barricading or blocking flow by any means available; and
- PREVENT antifreeze from entering any flowing streams or open water – antifreeze is HIGHLY soluble in water and cannot be contained if spilled.

Hazards:
- Moderately toxic by ingestion and inhalation; and
- Flammable.

Action for Fire:
- Use carbon dioxide, dry chemical, foam or water spray (fog);

Recovery:
- Ethylene glycol antifreeze can be soaked up by peat moss or by commercial sorbents such as Hazorb; and
- Access to spilled or recovered ethylene glycol by mammals should be prevented.

Disposal:
- Incineration under controlled conditions; and
- Burial at an approved site.

12.0 ACTION PLAN FOR $CaCl_2$

Handling of Salt used to create a brine for drilling:
- Hot water will be used to ensure downhole drill fluid circulation to the greatest possible drillhole depth. This technique is typically employed to a 250 m hole depth.
- Use only the minimum amount of salt required to maintain downhole circulation.
- Re-circulate and re-use the salt brine drill waters wherever possible.
- CONTAIN flow of salt water by dyking, barricading or blocking flow by any means available.
- If possible, pump salt brine into other appropriate tank/containers.

Hazards:
- Corrosive

Storage:
- Salt will be stored in secondary containment.

13.0 SABINA FUEL CACHE REPORTING FORM

Sabina
GOLD & SILVER CORP.

Back River Fuel Cache Reporting

This form is to be used to document all fuel caches related to the Back River project which range in size from 400-4000 L. As per the terms and conditions of the land use permits as well as Section 11 of the Territorial Land Use Regulations, notification is required to be made to the Federal Inspector (Indian and Northern Affairs Canada) for the area within 10 days of establishment of the fuel cache.

A new sheet is to be filled in for each fuel cache.

Caches are restricted in size to a maximum of 4000 L (19 full 205 L drums).

Report Date:			
Date Established:		***Proposed Date of Removal:***	
Land Use Permit:			
☐ INAC	_____	Section:	_____
☐ NIRB Screening Report	_____	Section:	_____
☐ KIA	_____	Section:	_____
Cache Location:			
☐ Goose Lake	☐ Boot Lake	☐ Wishbone North	☐ Other _____
☐ George Lake	☐ Boulder Pond	☐ Wishbone South	

Coordinates:	***Northing/Latitude***	***Easting/Longitude***

Fuel Type	***Jet fuel***	***AvGas***	***Gasoline***	***Diesel (P50)***
Container Type				
Container Volume				
Quantity				

Comments/Photo

Reported by:	***Name***	***Signature***

BRENV-FC-1209

14.0 INTERNAL SABINA SPILL REPORT FORM

Sabina
GOLD & SILVER CORP.

Back River Spill Report

This form is to be used for internal documentation of spills of any petroleum product, chemical, ethylene glycol (antifreeze), or other hazardous material in quantities of less than 25L. For quantities in excess of 25L, spills MUST be reported to the NWT/NU 24-hour spill reporting line (867-920-8130), and the appropriate form filled in. ALL spills (regardless of quantity) into a water body must be reported to the spill reporting line.

Report Date and Time:	***Spill Date and Time***: ☐ Spill occurred ☐ Spill observed
Spill Location: ☐ Goose Lake ☐ Other (e.g. Drill, Boulder Pond) ☐ George Lake	***Describe Location***:
Coordinates (Lat/Long or UTM):	

Product(s) Spilled:	Jet fuel	Diesel (P50)	Gasoline	AvGas	Oil (type)	Antifreeze	Other (describe)
Quantity (L or kg):							

Personnel Involved:	☐ Employee	☐ Contractor	☐ Visitor	☐ Other

Cause of Spill:
Containment/Cleanup Measures Taken:
Factors Affecting Spill or Recovery (weather, snow, ground conditions, etc.):
Additional Action Required:
Additional Comments:

	Name	***Employer***	***Signature***
Reported by:			
Reported to:			

BRENV-SR-1209

15.0 NWT-NU SPILL REPORT FORM

Northwest Territories Nunavut Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE
TEL: (867) 920-8130
FAX: (867) 873-6924
EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR	REPORT TIME	☐ ORIGINAL SPILL REPORT, OR	REPORT NUMBER ____-____
B	OCCURRENCE DATE: MONTH – DAY – YEAR	OCCURRENCE TIME	☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	
C	LAND USE PERMIT NUMBER (IF APPLICABLE)	WATER LICENCE NUMBER (IF APPLICABLE)		
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION	REGION ☐ NWT ☐ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES MINUTES SECONDS	LONGITUDE DEGREES MINUTES SECONDS		
F	RESPONSIBLE PARTY OR VESSEL NAME	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION		
G	ANY CONTRACTOR INVOLVED	CONTRACTOR ADDRESS OR OFFICE LOCATION		
H	PRODUCT SPILLED	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER	
	SECOND PRODUCT SPILLED (IF APPLICABLE)	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER	
I	SPILL SOURCE	SPILL CAUSE	AREA OF CONTAMINATION IN SQUARE METRES	
J	FACTORS AFFECTING SPILL OR RECOVERY	DESCRIBE ANY ASSISTANCE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT	
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS			

L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE
M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE

REPORT LINE USE ONLY

N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130

LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC	SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN	FILE STATUS ☐ OPEN ☐ CLOSED

AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			

PAGE 1 OF _____