Attachment 11:

Comprehensive Hazardous Materials Management Plan

Comprehensive Hazardous Materials Management Plan

January 2012

Preface

General Information

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.

The Hazardous Materials Management Plan (HMMP) will be executed within the scope of normal operations. The Back River Project is in the Exploration Phase, and as such, requires that the transportation, storage, handling and use of hydrocarbon products, and all other hazardous materials be conducted in a safe and efficient manner.

Annual Review

The HMMP will be reviewed and updated at least annually. Completion of the annual review of the HMMP will be documented through signatures of the personnel responsible for reviewing, updating and approving the HMMP.

Record of Changes

A record will document all significant changes that have been incorporated in the HMMP subsequent to the latest annual review. The record will include the names of the persons who made and approved the change, as well as the date of the approval.

Distribution List

Sabina will maintain a distribution list for the HMMP providing information about all parties that receive the plan including personnel, departments, and outside agencies.

Table of Contents

SECTION 1 • INTRODUCTION

1.1 PURPOSE & SCOPE OF THE PLAN

The purpose of this plan is to provide a consolidated source of information on the safe and environmentally sound transportation, storage, and handling of the major hazardous products that are used at Sabina's Back River Project. A hazardous material is one that, as a result of its physical, chemical, or other properties, poses a hazard to human health or the environment when it is improperly handled, used, stored, disposed of, or otherwise managed. In combination with Sabina's Emergency Response Plan (ERP) and Spill Contingency Plan (SCP), this Hazardous Materials Management Plan (HMMP) provides instruction on the prevention, detection, containment, response, and mitigation of accidents that could result from handling hazardous materials.

The plan is based on the following principles of best practice management for hazardous materials:

- identify and prepare materials and waste inventories;
- characterize potential environmental hazards posed by those materials;
- allocate clear responsibility for managing hazardous materials;
- describe methods for transport, storage, handling, and use;
- identify means of long-term storage and disposal;
- prepare contingency and emergency response plans;
- ensure training for management, workers, and contractors whose responsibilities include handling hazardous materials; and
- maintain and review records of hazardous material consumption and incidents in order to anticipate and avoid impacts on personal health and the environment.

All hazardous materials to be used at the Sabina's operation will be manufactured, delivered, stored, and handled in compliance with all applicable federal and territorial regulations. Sabina is committed to preventing, to the greatest extent possible, both inadvertent release of these substances to the environment and accidents resulting from mishandling or mishap. Sabina has instituted programs for employee training,

facility inspection, periodic drills to test systems, and procedural review to address deficiencies, accountability, and continuous improvement objectives.

Sabina actively works towards minimizing the generation of hazardous wastes by investigating alternatives to the use of hazardous materials, by recycling products and containers wherever feasible, and by treating wastes using state-of-the-art technologies before any release to the environment.

As with all other aspects of health and safety policy at the Back River Project, all employees will be expected to comply with all applicable precautions and handling procedures with regard to hazardous materials. Employees are also expected to report any concerns to their supervisors, the Occupational Health & Safety Committee (OH&SC), or senior site management. All staff is encouraged to bring forward suggestions for improvements that can be incorporated into procedure revisions as appropriate.

1.2 APPLICABLE LEGISLATION

Both federal and territorial legislation regulate the management of hazardous materials in Nunavut. Copies of relevant legal documents will be kept on file at the Project. Sabina will regularly update the HMMP with respect to applicable legislation, and ensure that current legislation documents are available at the site.

Management and safety personnel will provide an overview of the applicable regulations to all employees as part of their initiation and ongoing training. The acts, regulations, and guidelines pertinent to the hazardous products that will be used are listed in Appendix A.

The *Transportation of Dangerous Goods Act* classifies hazardous materials into nine main classes according to an internationally recognized system, as follows:

- **Class 1 – Explosives;**
- **Class 2 – Gases;**
- **Class 3 – Flammable liquids;**
- **Class 4 – Flammable solids;**
- Class 5 – Oxidizing substances and organic products;
- Class 6 – Poisonous (toxic) and infectious substances;

- Class 7 – Nuclear substances, within the meaning of the Nuclear Safety and Control Act, which are radioactive;
- Class 8 – Corrosives; and
- Class 9 – Miscellaneous products or substances.

SECTION 2 • OVERVIEW OF HAZARDOUS MATERIALS

2.1 HAZARDOUS MATERIALS AND FUEL STORAGE LOCATIONS

2.1.1 Goose camp

The primary storage locations for hazardous materials, hazardous wastes and fuel are shown on Figure 1. Comprehensive lists of all hazardous materials and the estimated quantities that are and will be stored at the sites are provided in Table 1. This table lists the maximum amount of product anticipated to be transported and stored on site.

The storage facilities are clearly identified as storage facilities for hazardous materials with proper labelling. Only authorized personnel have access to the area.

2.1.2 George camp

The primary storage locations for hazardous materials, hazardous wastes and fuel are shown on Figure 2. Comprehensive lists of all hazardous materials and the estimated quantities that are and will be stored at the sites are provided in Table 1. This table lists the maximum amount of product anticipated to be transported and stored on site.

The storage facilities are clearly identified as storage facilities for hazardous materials with proper labelling. Only authorized personnel have access to the area.

Figure 1: Goose Camp Layout

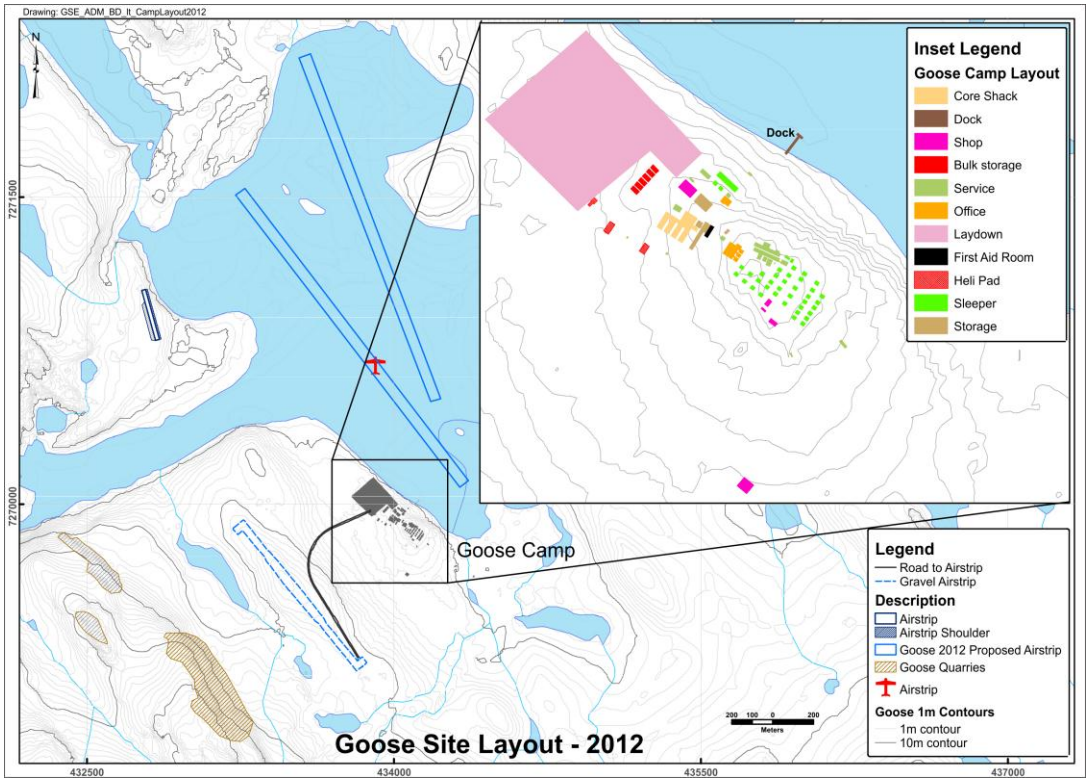

Figure 2: George Camp Layout

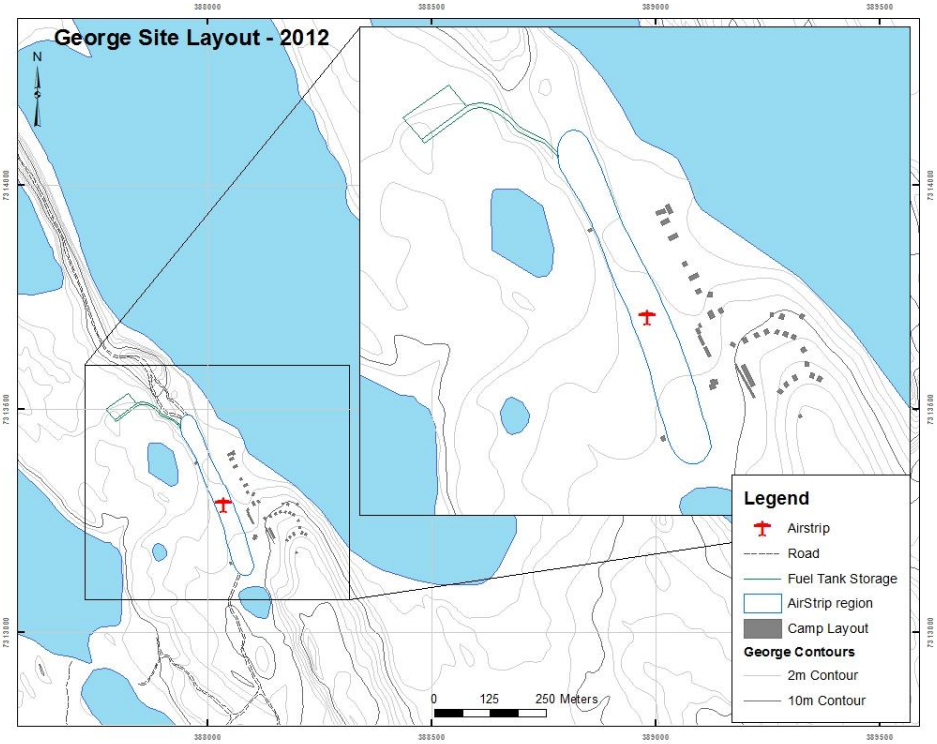

Table 1. Hazardous Materials Stored (in 2012)

Material	***Amount (max. in Goose camp)***	***Amount (max. in George camp)***
Diesel – Envirotanks litres	*873,287*	*285,904*
Diesel – 205 L drums	*3,825*	*1,005*
Jet fuel – 205 L drums	*2,791*	*204*
Gasoline	*136*	*34*
AvGas – 205 L drums	*2-3*	*2 – 3*
Propane – 100 lb cylinders	*10*	*4*
Propane – 250 lb cylinders	*71*	*62*
Calcium Chloride – 50lb bags	*24,000*	*5,006*
Chlorine (Bleach) - 8L plastic jugs	*Approx. 12*	*Approx. 10*
Antifreeze – 4L plastic jugs	*Approx 45*	*Approx 35*
Plumbing antifreeze – 4L jugs	*Approx 25*	*Approx 20*

2.1.3 Hazardous Materials and Fuel Storage Description

Diesel fuel is required to generate power on-site, heat buildings and to fuel mobile equipment. The diesel fuel storage at the camps consists of 205L drums as well as double walled tanks (up to 70,000L ULC-approved) and bladders (up to 50,000L) situated within a lined secondary berm. Secondary containment (Instaberms) is used for all of the drummed fuel on site.

Supplies are replenished with quantities dependent on the scope of the program. Inventories of fuel at each site are dynamic and dependent 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 10,000 L (approximately 50 drums) in each cache. Specialized oils and greases used by the drilling contractors are stored in sheds or sea-cans designated for that purpose. Propane tanks are stored on pallets, strapped together and area marked with pylons.

There are minimal quantities of reagents such as dilute HCl (<5L), concentrated HNO_3 (vials of <10mL), and other materials on site for geological testing and environmental sample preservation.

Chlorine bleach is used to treat the drinking water supply prior to filtration and U/V treatment. Chlorine is used at a rate of 180ml/1000L and brought to site on an “as-

needed" basis. It is also used to clean and disinfect surfaces in camp, for example in the kitchen. It is stored in the original plastic 8.8L jug (household bleach) and stored on shelves near the water supply tanks.

Antifreeze and plumbing antifreeze are also used on site in the equipment and plumbing to protect against freezing. This is brought to camp on an 'as-needed' basis and stored in the original 4L plastic jugs in the shop areas. Waste antifreeze from the equipment is collected into metal drums, sealed and shipped out to Yellowknife for disposal. Waste plumbing antifreeze is released to the graywater sump area.

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. Salt is stored in bags, with 28 sealed in a megabag and placed on a pallet.

Fire extinguishers and dust suppression is also used on site as needed and is stored in appropriate facilities. 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.

Waste chemicals that require special attention and handling include waste oil, hydraulic oil, lubricating oil, calcium chloride, grease, and ethylene glycol.

Waste oil is used to either, heat the maintenance and core logging facilities, or to fuel the incinerator. If not used to fuel heaters or incinerator, waste oil and oil from filters are backhauled for appropriate disposal. Drained spent oil filters will be stored in drums for removal from the site for disposal at an authorized disposal facility

Waste batteries are sealed in plastic drums and shipped to Yellowknife for disposal; smaller batteries from handheld equipment is sealed in plastic bags and shipped to Yellowknife for recycling or disposal.

2.2 TYPES OF HAZARDOUS MATERIALS

The Back River Project will require the use of the following types of classified hazardous materials:

- *Petroleum Products and Lubricants* – diesel fuel, oils, greases, anti-freeze, and solvents used for equipment operation and maintenance

- *Water Treatment Consumables* – Chlorine.
- *Calcium Chloride* - to be used for exploration drilling.

2.3 GENERAL HAZARDOUS MATERIAL STORAGE GUIDELINES

Sabina is committed to the safe and appropriate storage of fuels, hazardous materials and hazardous wastes. The following sections outline general guidelines for storing fuels, hazardous materials and hazardous wastes.

2.3.1 General Guidelines for Storage Drums/Containers

Hazardous materials/waste shall be stored in drums/containers according to the following guidelines:

- In the original containers, where possible, or in containers compatible with the material being stored to prevent corrosion or chemical interaction that could lead to leaks or fires.
- Storage containers shall be in good condition, sealable and not damaged or leaking.
- Drums containing hazardous materials/wastes expected to be in storage for more than six months shall be placed on pallets or on a well-drained storage area to prevent rusting.
- Each container shall be clearly labelled to identify the substance being stored according to the requirements of the *Work Site Hazardous Materials Information System* (WHMIS)
- Containers shall be kept closed except when adding or removing product.
- Containers with product shall be kept in the upright position; empty drums can be placed horizontally with a 3-9 configuration
- Containers shall be arranged to prevent damage from falling or dislodging.
- Containers shall be arranged to allow for easy access and inspections.

2.3.2 General Guidelines for Storage Areas

To assist in the safe and secure storage of fuels, hazardous materials and hazardous wastes, the following general guidelines for storage areas/facilities are followed:

- Design of storage areas are in compliance with the *National Fire Code*, where appropriate.
- Compliance with the Canadian Council of Ministers of the Environment (CCME) publication, *"Environmental Code of Good Practice for Above Ground Storage Tank Systems Containing Petroleum Products"* are followed. This CCME code deals with inventory control, inspections, corrosion protection, records and monitoring. Environment Canada's *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* outline registration and documentation requirements for storage tanks.
- Storage areas have controlled access. Only authorized and trained personnel have access to storage areas.
- Storage areas are adequately signed indicating that hazardous materials/wastes are stored therein.
- Storage locations are clearly defined and marked to prevent damage of storage drums and containers in the event they are covered by snow.
- Incompatible materials are segregated by chemical compatibility within the storage area to prevent contact between materials in the event of a release.
- Storage areas are located at least 30 metres from surface water and on a low-permeability area;
- Storage areas are readily accessible for fire fighting and other emergency procedures.
- Secondary containment is installed to allow for the containment of at least 110% of the largest container or tank volume within the contained area, plus 10% of the aggregate capacity of all other containers or tanks.
- Storage areas are constructed, or provided with barriers, to protect containers from physical damage.
- Adequate spill and emergency response equipment have been installed at each storage area (i.e. spill control, fire protection, etc.). A list of spill control equipment is provided in the SCP.

SECTION 3 • HAZARDOUS MATERIALS LIFE CYCLE MANAGEMENT

3.1 LIFE CYCLE MANAGEMENT

"Life cycle management" implies the assessment of a particular product over its entire life — from the time a material need is identified to the time the product is fully consumed or disposed of as waste. It covers product supply, transportation, storage, handling, recycling, and waste disposal. Sabina is committed to ensuring proper life cycle management of all products used at the site, including hazardous materials. Sabina and its contractors will deal only with reputable, certified suppliers, transporters, and expediters.

3.1.1 Delivery

All hazardous materials are delivered to site by commercial carriers in accordance with the requirements of the *Canadian Transportation of Dangerous Goods Act* (TDGA). Carriers are licensed and inspected as required by the Department of Transportation. All required permits, licences, and certificates of compliance are the responsibility of the carrier. All shipments are properly identified and labelled. Shipping papers are accessible and include information describing the substance, immediate health hazards, fire and explosion risks, immediate precautions, fire-fighting information, procedures for handling leaks or spills, first aid measures, and emergency response telephone numbers.

Each transportation company is required to develop a spill prevention, control, and countermeasures plan to address the materials they are importing. In the event of a release during transport, the commercial transportation company is responsible for first response and cleanup. Sabina intends to periodically verify the qualifications of transport companies, their personnel and the existence of their spill prevention, control and countermeasures plan.

3.1.2 On-Site Handling

Once dangerous goods are received at the workplace, additional regulations apply. The federal *Workplace Hazardous Materials Information System* (WHMIS) calls for the proper labelling of products, the availability of product information in the form of MSDS, and employee education on how to identify and handle hazardous products. Sabina obtains MSDS with new product deliveries and retains MSDS current (i.e. no

older than three years), and maintaining a system of hardcopy or electronic MSDS that are readily accessible by all employees.

All hazardous materials are stored in secured areas to prevent access by unauthorized personnel or any tampering. All tanks used for the storage of diesel fuel have been installed in secondary containment areas sized to hold at least 100% of the volume of the largest tank, plus 10% of the aggregate capacity of all other containers or tanks. Additional guidelines for the storage of hazardous materials are provided in Section 2.3.2.

In support of pollution prevention, Sabina has established procedures for the regular monitoring of storage containers and facilities. If deficient conditions are identified, appropriate corrective actions are taken and documented. Additional details for inspection of storage areas are provided in **Section 8.** Emergency response procedures for spilled chemical substances are provided in the SCP. These procedures outline the response to accidental spills or releases of hazardous materials to minimize health risks and environmental effects. Included are procedures for evacuating personnel, maintaining safety, cleanup and neutralization activities, emergency contacts, internal and external notifications to regulatory authorities, and incident documentation.

3.1.3 Wastes

On becoming wastes, materials are stored and/or disposed of in accordance with specific government regulations and guidelines. Sabina stores most waste materials on site in secure facilities until they can be transported to other provincial jurisdictions for recycling or disposal.

The Department of Environment, Environment Protection Service (EPS) monitors the movement of hazardous waste, from the generator to final disposal, through use of a tracking document known as a Waste Manifest. Accordingly, a Waste Manifest accompanies movements of hazardous wastes for the Sabina Project. Sabina is registered with the EPS as a waste generator, and will employ only registered waste carriers to transport waste to registered/approved waste receivers. A copy of the completed manifest will be maintained for a period of two years after the hazardous waste is received by the authorized waste disposal facility.

3.1.4 Empty Product Containers

Many empty chemical containers are not safe to dispose of directly and require handling precautions identical to those for full containers. Chemical users must be familiar with safe waste handling and storage procedures supplied by manufacturers in MSDS. The containers are backhauled to Yellowknife for disposal at an approved facility.

SECTION 4 • PETROLEUM PRODUCTS

4.1 PRODUCT DESCRIPTION

The operation will use fuel and lubricants (petroleum products) and are transported, stored, handled and transferred and used in compliance with the appropriate legislation and applying Best Management Practices.

4.2 DELIVERY TO SITE

With the exception of diesel fuel, most petroleum fuel and lubricant products will be delivered to site and stored in the original packing container from the manufacturer. These types of containers include a variety of sealed drums, pails, cans, and tubes.

Due to transportation restrictions, a full year's supply of fuel and lubricants will be transported and stored on-site, in order to meet the demand of the upcoming year. A large proportion of the petroleum products (diesel) is delivered in bulk during the winter months. Delivery to camp is via aircraft specifically outfitted for bulk fuel transport and transfer.

All fuel transfer and storage facilities have been designed in accordance with the Canadian Council of Ministers for the Environment (CCME, 1994) *Environmental Code of Practice for Above Ground Storage Tank Systems Containing Petroleum Products*, and the *National Fire Code*.

Appropriate measures are in place to minimize impacts to surface water, groundwater and soils from potential vehicle accidents when transporting hazardous materials to the site. Details of spill responses are presented in the SCP.

4.3 FUEL TRANSFER PROCEDURES

General procedures for transferring fuel from the aircraft to the bulk storage tanks and bladders are listed below. Similar procedures would be followed for transfer of fuel out of drums.

Before fuel transfer, verify that:

- All fuel transfer hoses are connected properly and couplings are tight.
- Secondary containment is available at all pumps and connection points.
- Transfer hoses are not obviously damaged.
- Fuel transfer personnel are familiar with procedures. Typically these personnel are referred to as “fuel walkers” and they will supervise the connection and transfer of the fuel.
- Personnel are located at both the fuel delivery ship/truck and fuel transfer tank(s) and can manually shut off the flow of fuel.
- Fuel transfer will then proceed per the established procedures of the contract supplier and/or personnel responsible for transferring fuel.
- Any accidents or spills must be reported immediately to the ‘fuel walkers’ and reported to the Operations Supervisor. Notification and response procedures are detailed in the SCP.

4.4 CONTAMINATED SOILS AND SPILLS

Contaminated spill pads and soils resulting from the storage and handling of fuels and lubricants will be salvaged at the time such impacts are identified, and put into megabags or into 205L drums, labelled and eventually shipped off-site to an approved disposal facility. Contaminated pads and absorbent material is also incinerated on-site.

4.5 USED PETROLEUM PRODUCTS

Used oil that is no longer suitable for its intended use is classified as a hazardous waste. The discharge of used oil into the environment, including but not limited to landfills, sewers and water bodies, is prohibited.

Where possible, waste oil is used in waste oil burners to heat the Quonset huts. Otherwise,used oil products will be collected in tanks or drums marked “Waste Oil”

and disposed of at an approved facility. Empty petroleum containers will be stored on site in a designated area and returned to the supplier on backhauls. Oil filters will be punctured and/or crushed and drained of their contents for 24 hours prior to disposal.

SECTION 5 • CALCIUM CHLORIDE AND OTHER CHEMICAL

5.1 PRODUCT DESCRIPTION

Calcium Chloride is used at the site to assist in exploration drilling. Other chemicals on-site include bleach and antifreeze.

5.2 DELIVERY TO SITE

Chemicals will be delivered to site and stored in the original packing container from the manufacturer. These types of containers include a variety of bags and plastic jugs.

Due to transportation restrictions, a full year's supply of calcium chloride will be transported and stored on-site, in order to meet the demand of the upcoming year. A large proportion of the salt is delivered in bulk during the winter months and delivered to camp via aircraft.

Other chemicals are brought to site on an "as-needed" basis over the exploration season.

5.3 TRANSFER

The release or spillage of any of these substances would possibly result in environmental impacts and pose a potentially hazardous situation for those personnel exposed to these materials. It is essential that materials deemed to be potentially hazardous be dealt with in a cautious manner, in strict adherence to recommended regulations outlined in the legislation, whether the substance is provided in large or smaller quantities as this will prevent serious repercussions should an accidental release of material happen

General procedures for transferring chemicals from the aircraft to storage are listed below. Similar procedures would be followed for transfer of chemicals for use.

Before transfer, verify that:

- Area is clear and PPE equipment is in use.
- Spill response material is available.
- Containers are not obviously damaged.
- Personnel are familiar with transfer procedures. These personnel arefamiliar with helicopter slinging procedures as well.
- Only those personnel that are familiar with slinging procedures
- Any accidents or spills must be reported immediately to the Operations Supervisor. Notification and response procedures are detailed in the SCP.

5.4 WASTE

Once salt is used it is part of the drill cuttings and remaining drill water. The polydrill system is used at the Back River Project and allows the collection and containment of drill cuttings. This material is returned to camp and disposed in either the exploration trench/designated disposal area or is backhauled to Yellowknife for disposal in approved facility.

Used bleach and plumbing antifreeze is released to the greywater discharge. Used equipment antifreeze is collected and sealed in drums marked “Waste Antifreeze” and backhauled to Yellowknife for disposed of at an approved facility.

SECTION 6 • INVENTORY, INSPECTION & RECORDS

A contract expediting company in Yellowknife will arrange all deliveries to the Back River Project and will include the hazardous materials discussed in this plan. The Operations Supervisor will have ultimate responsibility for supervising the receipt, inspection, and recording of all material inventories at site. The inventory control will reconcile total amounts received against amounts ordered.

Inventory control tracks and monitors use of these materials with a weekly inventory count and a monthly reconciliation. If any issues are noted during this tracking, it is reported to the Operations Supervisor. Exploration staff conduct daily and weekly inspections of drilling areas and if any issues are noted, it is reported to the Exploration Manager and Drill Foreman.

6.1 PETROLEUM PRODUCTS

6.1.1 Inventory Management

Diesel fuel use will be metered automatically when it is pumped from the bulk tanks. The metered volumes will be summarized weekly and reconciled against tank levels determined manually with a dipstick from the top of the tanks. Dip stick readings are taken every day and recorded. Diesel fuel consumption for the power generators will be recorded weekly.

Aviation fuel will be dispensed from drums as required under the supervision of aircraft personnel. Consumption and on-site volumes will be reconciled monthly.

Lubricants and other petroleum products will be inventoried weekly and monthly.

6.1.2 Inspection

The Operations Superintendent will coordinate for inspection of all fuel and lubricant storage areas. All inspections will be logged with the date and time of inspection, facility inspected, and name of the person making the inspection.

The condition of hazardous materials storage areas, containers, tanks, connectors and associated plumbing will be checked on a regular basis. Observations on their condition will be logged, dated and kept near the corresponding storage area. Drums/containers will be inspected for the presence and legibility of symbols, words or other marks identifying the contents, signs of deterioration or damage such as

corrosion, rust, leaks at seams or signs that the drum/container is under pressure such as bulging and swelling, spillage or discoloration on the top or sides of the drum/container. If leaks or deterioration is encountered it will be noted and addressed in a timely manner.

The hazardous materials area's secondary containment will be inspected and the condition of the secondary containment will be noted. Arrangements will be made for repairs if necessary.

Any accidental damage to containment structures will be inspected immediately and appropriate repairs undertaken. The extent of damage will be reported in writing to the Operations Supervisor. The report will note any remedial repairs that may be made, the date of any repairs, and the need for any follow-up inspection.

6.1.3 Records

Records pertaining to storage, use, and loss of fuels and lubricants are required by CCME and the Fire Marshal (under the *National Fire Code).* The following records will be prepared under the supervision of the Operations Superintendent:

- reconciliation of bulk inventory from resupply logs
- weekly use summaries
- weekly reconciliation for each storage tank
- inspections and maintenance checks of the storage tank, piping, and delivery systems
- reports of leaks or losses
- reports of spill responses
- records of training.

6.2 MISCELLANEOUS HAZARDOUS/TOXIC MATERIALS

6.2.1 Inventory Management

Adequate quantities of all hazardous chemicals will be reconciled against orders on receipt. The appropriate group responsible for the miscellaneous chemicals is responsible for reconciling the resupply inventory.

6.2.2 Inspection

During operations, the appropriate group responsible for storage and handling of the miscellaneous chemicals are to regularly inspect all areas where such hazardous materials are used and stored. Any problems will be noted and reported to the Operations Superintendent. The Operations Superintendent will be responsible for weekly or monthly inspections of miscellaneous hazardous materials and storage areas.

6.2.3 Records

The quantity of hazardous materials received, used, and in possession of personnel are recorded by Inventory Control. Everyone are to comply with the environmental regulations.

SECTION 7 • TRAINING

7.1 GENERAL

All staff and contractors will receive the following training:

- Site orientation and operations overview
- WHMIS
- Emergency and spill response (see also the SCP and ERP)

Employees will receive additional training in mine safety as specified by the *Mine Health and Safety Act* and regulations. Sabina will ensure compliance with the training requirements specified in the Act and regulations.

A record of training received will be maintained.

7.2 PETROLEUM PRODUCTS HANDLERS

Personnel who handle petroleum products will be expected to be conversant with relevant MSDS information. As well, these personnel will be given training in the following:

- Transportation of dangerous goods (TDG)
- Sabina's fuel handling procedures (outlined in **Section 6**)
- Spill response and cleanup procedures for petroleum (see the SCP)
- Emergency response, especially firefighting procedures (see the ERP).
- Equipment operations and PPE requirements
- Slinging and helicopter safety

7.3 CALCIUM CHLORIDE AND OTHER CHEMICALS HANDLERS

Only trained and certified persons will work with Calcium Chloride and will undertake formal training and on-the-job training. The Operations Superintendent and Exploration Manager will check the adequacy of training. Training requirements will include (but not necessarily be limited to):

- First aid
- Transportation of dangerous goods (TDG)
- WHMIS
- Emergency response, especially firefighting procedures (see the ERP).
- Equipment operations and PPE requirements
- Slinging and helicopter safety

7.4 THIRD PARTY CONTRACTORS

It is expected that third party contractors receive adequate and comprehensive training to conduct their work tasks from their employer. Sabina intends to review the general qualifications of third party contractors prior to having them work at the site. In addition, the contractor companies may also be requested to confirm the qualifications of specific individuals that they may have working at the site.

Third party contractors working on the site will be expected to participate in, and complete a site specific health and safety training session. The training session is envisioned to be valid for a period of one year, after which time the contractor may be required to complete the training again, or attend a refresher. The training session will outline site specific hazardous and response procedures that they should be aware of in the course of conducting their work on site. The training session will cover hazardous materials management.

SECTION 8 • LIST OF ACRONYMS

ANSI	American National Standards Institute
CCME	Canadian Council of Ministers of the Environment
EPS	Environmental Protection Service
ERP	Emergency Response Plan
ERT	Emergency Response Team
FS	Fuel Storage Area
HAZCOM	Hazard Communication
HM	Hazardous Materials Storage Area
HMMP	Hazardous Materials Management Plan
HR	Human Resources
HSC	Occupational Health & Safety Committee
HW	Hazardous Waste Storage Area
ISO	International Organization for Standardization
MSDS	Materials Safety Data Sheets
NIOSH	National Institute for Occupational Safety and Health
OHSA	Occupational Health and Safety Administration
OHSP	Occupational Health & Safety Plan
PPE	Personal Protective Equipment
SGSP	Sabina Gold and Silver Project
SCP	Spill Contingency Plan
TDG	Transportation of Dangerous Goods
TDGA	Transportation of Dangerous Goods Act
WCB	Workers' Compensation Board
WHMIS	Workplace Hazardous Materials Information System

APPENDIX A

List of Applicable Legislation
Federal Legislation and Guidelines, Federal Codes and Other Guidance Documents
And Territorial Legislation and Guidelines

The following is a list of federal and territorial legislation and guidelines that regulate the management of hazardous materials in Nunavut, and which are considered potentially applicable to Back River Project. As part of Sabina's overall environmental management system for the Project, this list is updated at least annually to ensure it represents current and relevant information.

Federal Legislation

- *CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999 S.C. 1999, c. 33*
    - *Code of Practice for the Reduction of Chlorofluorocarbon Emissions from Refrigeration and Air Conditioning Systems.*
    - *Environmental Code of Practice for Elimination of Fluorocarbon Emissions from Refrigeration and Air Conditioning Systems.*
    - *Environmental Code of Practice on Halons Code of Practice EPS 1/RA/3E.*
    - *Environmental Emergency Regulations SOR/2003-307.*
    - *Environmental Guidelines for Controlling Emissions of Volatile Organic Compounds from Aboveground Storage Tanks, CCME-EPC-87-E, as amended.*
    - *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations SOR/2005-149.*
    - *Federal Halocarbon Regulations, 2003 SOR/2003-289.*
    - *Interprovincial Movement of Hazardous Waste Regulations SOR/2002-301.*
      Ozone-Depleting Substances Regulations, 1998 SOR/99-7..
- *TRANSPORTATION OF DANGEROUS GOODS ACT, 1992 S.C. 1992, c. 34*
    - *Transportation of Dangerous Goods Regulations SOR/2001-286.*
    - *Transportation of Dangerous Goods Regulations - Schedules SOR/2001-286.*

Federal Codes and Other Guidance Documents

- National Fire Code.
- Indian and Northern Affairs Canada. 2005. DEW Line Cleanup Barrel Protocol.
- Canadian Council of Ministers for the Environment (CCME) - Environmental Code of Practice for Above-Ground and Underground Storage Tanks Systems containing Petroleum Products and Allied Petroleum Products (2003).
- CCME - Canadian Wide Standards for Petroleum Hydrocarbons in Soil.
- CCME - Canadian Environmental Quality Guidelines.
- Environment Canada (Tilden & Westerman). 1990. Guidelines for the Preparation of Hazardous Material Spill Contingency Plans.
- Department of Fisheries and Oceans. 1998. Guidelines for the Use of Explosives in or Near Canadian Fisheries Water.

Territorial Legislation

- *ENVIRONMENTAL PROTECTION ACT R.S.N.W.T. 1988, c. E-7*
    - *A Guide to the Spill Contingency Planning and Reporting Regulations January 2002.*
    - *Environmental Guideline for Contaminated Site Remediation November 2003.*
    - *Environmental Guideline for Waste Lead and Lead Paint.*
    - *Guideline for Ozone Depleting Substances.*
    - *Guideline for the General Management of Hazardous Waste in the NWT.*
    - *Guideline for the Management of Waste Antifreeze.*
    - *Guideline for the Management of Waste Batteries.*
    - *Guideline for the Management of Waste Paint.*
    - *Guideline for the Management of Waste Solvents.*
    - *Guideline for Dust Suppression, February 1998.*
    - *Spill Contingency Planning and Reporting Regulations R-068-93.*
    - *Used Oil and Waste Fuel Management Regulations R-064-2003.*
    - *Plain Language Guide to the Used Oil and Waste Fuel Management Regulations.*
- *TRANSPORTATION OF DANGEROUS GOODS ACT, 1990 S.N.W.T. 1990, c. 36*
    - *Transportation of Dangerous Goods Regulations R-049-2002.*
- *EXPLOSIVES USE ACT R.S.N.W.T. 1988, c. E-10*
    - *Explosives Regulations R.R.N.W.T. 1990, c. E-27.*
    - *FIRE PREVENTION ACT R.S.N.W.T. 1988, c. F-6*
    - *Fire Prevention Regulations R.R.N.W.T. 1990, c. F-12.*
    - *Propane Cylinder Storage Regulations R-094-91.*
- *MINE HEALTH AND SAFETY ACT (NUNAVUT) S.N.W.T, 1994, c. 25*
    - Mine Health and Safety Regulations R-125-95.
- *SAFETY ACT R.S.N.W.T. 1988, c. S-1*
    - *General Safety Regulations R.R.N.W.T. 1990, c. S-1.*
    - *Work Site Hazardous Materials Information System Regulations R.R.N.W.T. 1990, c. S-2.*