



## **Attachment 7**

Spill Contingency Plan



**SELWYN  
CHIHONG**  
MINING LTD.

**SPILL CONTINGENCY PLAN  
FOR  
THE NORTHWEST TERRITORIES  
EXPLORATION WORK**

Revision Date: July 28, 2021

File:

NWT Spill Plan – Rev 4.0



**DOCUMENT APPROVAL**

	<b>Title</b>	<b>Print Name</b>	<b>Signature</b>
Reviewed by:	Environmental Consultant	Sukie Sidhu	
Approved by:	CEO	Shi Huang	
	A/VP Exploration	Gabe Xue	

Selwyn Chihong Mining Ltd. is in the process of restructuring the Company. As a part of this process there has been a temporary change in staffing associated with the Environment and External Affairs Division.

There are specific references in this plan to this Division and the required tasks and actions that will be undertaken by key positions within the Division.

During this restructuring phase all references to tasks and actions that are required by the VP Environment and External Affairs will be undertaken by their designate. All references to tasks and actions to be undertaken by the Senior Environmental Officer will be undertaken by Contracted Personnel.

**DOCUMENT CONTROL**

<b>Rev. #</b>	<b>Date</b>	<b>Revision By</b>	<b>Approved By</b>	<b>Reason for Change</b>
1.0	15/JUL/2016	S. Sidhu	M. Albert	Version for NWT Exploration (submitted for Land Use Permit application September 2016)
2.0	16/NOV/2016	S. Sidhu	M. Albert	Addition of hydrocarbon contaminated soil to special waste section.
3.0	6/SEPT/2017	S. Sidhu	M. Albert	No Substantive changes. Updated various contact info and the chart on page 11.
4.0	28/JULY/2021	S. Sidhu	G. Xue	Company logo updated. Capturing changes requested by Sahtu Land and Water Board. Submitted for Land Use Permit renewal SC16-002.

## Table of Contents

1.0	SUMMARY .....	1
2.0	INTRODUCTION .....	1
2.1	Project Information .....	1
2.2	SCML Environmental Policy .....	2
2.3	Regulatory Background – Northwest Territories .....	2
2.4	Purpose & Scope of the Spill Contingency Plan .....	3
2.5	Distribution of Plan .....	4
2.6	Implementation .....	4
2.7	Training Schedule .....	5
2.8	Preventative Measures .....	5
3.0	CONTAMINANTS & SPILLS - DEFINITIONS AND CATEGORIES .....	5
3.1	Contaminant Definition .....	5
3.2	Spill Definition .....	6
3.2.1.	Reportable (Major) Spills .....	6
	<i>Table 1: Contaminant Spill Reporting Thresholds</i> .....	6
3.2.2.	Non-Reportable (Minor) Spills .....	6
3.3	Fixed Location Storage .....	6
4.0	CONTAMINANTS – TYPES, LOCATION & QUANTITIES .....	7
4.1	Types of Contaminants .....	7
4.2	Mobile Storage .....	7
5.0	SPILL ACTION PLAN .....	7
5.1	Duties & Responsibilities .....	8
	Spill Witness .....	9
	Emergency Response Coordinator .....	9
	On-Scene Coordinator .....	10
	Emergency Response Team .....	10
	Senior Environmental Officer .....	10
	VP Environment & External Affairs .....	10
5.2	Initial Action .....	11
5.3	Containment & Cleanup .....	11
	<i>Table 2: Containment &amp; Cleanup – Diesel, Lubricants &amp; Special Waste</i> .....	12
	<i>Table 3: Containment &amp; Cleanup – Gasoline &amp; Jet A/B Aviation Fuel</i> .....	13
5.4	Spill Reporting – Major Spills .....	13
	<i>Table 4: SCML Staff Contact Information</i> .....	14

<i>Table 5: Government Contact Information</i> .....	15
5.5 Spill Reporting – Minor Spills .....	15
5.6 Managing Spill-Related Wastes .....	15
<i>Table 6: Management of Spill-Related Waste</i> .....	16
5.7 Restoring Areas Affected by Spills .....	16
6.0 SPILL RESPONSE RESOURCES.....	16
6.1 On-Site Resources.....	16
<i>Table 7: Spill Kit Contents</i> .....	17
6.2 Off-Site Resources.....	18
<i>Table 8: Off-Site Spill Response Resources</i> .....	18
7.0 MONITORING AND EVALUATION .....	19
Appendix I .....	20
Appendix II .....	22

## **APPENDICES**

Appendix I – NT-NU Spill Report Form  
Appendix II – SCML Spill Log and Record

## **GLOSSARY AND ACRONYMS**

<b>Term</b>	<b>Meaning</b>
SCML	Selwyn Chihong Mining Ltd.
NT	Northwest Territories
YT	Yukon Territory



## **1.0 SUMMARY**

This Spill Contingency Plan is intended to provide guidance for management on how to respond to spills that may occur at the Project site during exploration activities in the Northwest Territories, in a manner that protects the environment and people, ensures that the land is maintained in a good state for future use and enjoyment, and complies with all legislation and permits.

Fuel is the most likely contaminant that may spill during exploration activities at the Selwyn Project in the Northwest Territories. Prevention of fuel spills is first and foremost achieved by storing fuel away from sensitive environments, such as creeks, ensuring that the proper spill response equipment is located near to fueling areas and by using temporary mini-berms and absorbent pads when fueling. Prior to starting any fueling it is important that the correct spill response equipment is available in vehicles, the vehicles are parked near the area where the fueling is taking place, that employees are trained and knowledgeable on how to respond to spills in different environments (e.g., land, water, or snow), that the correct procedures are in place to report the spill to the required personnel and authorities, and that employees are able to get help quickly in the event of a larger spill. This plan includes lists of the required spill response equipment, tables outlining the procedures to be followed for each kind of spill, contact lists and spill reporting form templates.

## **2.0 INTRODUCTION**

### **2.1 Project Information**

Selwyn Chihong Mining Ltd (SCML) is a base metals exploration and development company with mineral claims that straddle the Yukon (YT) and Northwest Territories (NT) border in the Howard's Pass area. The collective claims area is referred to as the Selwyn Project.

The claims form a roughly rectangular 60-km long northwest-trending block covering an area of about 32,000 hectares. The majority of these claims (~85%) are in the YT, the remainder are in the NT. SCML maintains two 50-person camps on the Yukon side; XY Camp is located near the YT/NT border at the southeast end of the claim blocks at about 1500 m asl, Don Camp is located at the center of the claims at about 1200 m asl. Each camp is serviced by a gravel airstrip.

The claim block is located 30 km northeast of Whitehorse and 260 km north of Watson Lake. Other communities close to the Project are Ross River, YT (180 km to the west), and Tungsten, NT (75 km to the southeast).

Ground access to the Selwyn Project is via the Howard's Pass Access Road (HPAR). The HPAR is an 80-km long gravel road that links the Project site to the public highway system in the YT. The HPAR originates at km 188 of the Nahanni Range Road (about 10 km north of Tungsten) and terminates near SCML's XY Camp at Howard's Pass. At the time of this writing, HPAR was best suited for summer operations with single lane traffic due the narrowness and road construction materials. The HPAR is located entirely in the Northwest Territories.

This Spill Contingency Plan (the Plan) applies to all SCML exploration activities in the NT, including lands under mineral claims/lease.

## 2.2 SCML Environmental Policy

SCML is committed to the responsible exploration and development of mineral resources. In accordance with the Mining Association of Canada SCML has adopted a responsible approach to social, economic, and environmental performance that is aligned with the evolving priorities of our communities of interest.

SCML is committed to:

- Seeking to minimize the impact of our operations on the environment through all stages of exploration and development;
- Seeking to minimize any adverse effects caused by the accidental release of pollutants into the environment; and
- Practicing continuous improvement through the application of new technology, innovation, and reasonable best practices in all facets of our operation.

## 2.3 Regulatory Background – Northwest Territories

Spill contingency planning and spill response and reporting for SCML's operations in the NT are regulated under the Northwest Territories *Environmental Protection Act*, the *Mackenzie Valley Resource Management Act*, the *Federal Real Property Act*, the *Federal Fisheries Act*, the *Federal Transport of Dangerous Goods Act*, and the *Canada National Parks Act*, their respective Regulations, and the licenses and permits issued to SCML under these Regulations. This Spill Contingency Plan is intended to follow these Acts, Regulations and Permits/Licenses.

Contaminants are classified in Schedule B of the Northwest Territories Environmental Protection Act, Spill Contingency Planning and Reporting Regulations (<https://www.justice.gov.nt.ca/en/files/legislation/environmental-protection/environmental-protection.r2.pdf>). Classifications in those regulations are based upon classifications and/or divisions set out in the Federal Transportation of Dangerous Goods Act (1992).

The requirement for SCML to develop a spill contingency plan is established in the Land Use Permit issued to SCML by the Sahtu Land and Water Board. Under this permit SCML is required to ensure that adequate contingency plans and spill kits are in place, prior to commencement of operations, and required to be ready for and respond to any potential spills.

SCML must adhere to the following conditions under permit S16C-002 in relation to substances:

- The permittee shall not use any Drilling Fluid, muds or additives that were not identified in the accepted application, unless the MSDS's are provided to the Board, and Inspection and usage of the chemical(s) is authorized in writing by the Board.
- At least seven days prior to the use of any chemicals that were not identified in the accepted application, the MSDS sheets must be provided to an Inspector and the Board.
- The Permittee shall maintain a record of all spills. For all reportable spills, as defined in

the *NT-NU Spill Report form (Appendix I)*, the Permittee shall: (a) immediately report each spill to the 24-hour spills report line 867-920-8130, (b) report each spill to an Inspector within 24 hrs; and (c) submit, to the Board and an Inspector, a detailed report on each spill within 30 days.

- The Permittee shall: (a) examine all Fuel Storage Tanks and containers for leaks a minimum once per day; and (b) repair all leaks immediately.
- The Permittee shall not place any Fuel Storage Containers or tanks within 30 meters of the Ordinary High-Water Mark of any Watercourse, unless otherwise authorized in writing by an Inspector.
- The Permittee shall ensure that all fuel caches containing 20 or more Fuel storage Containers have adequate Secondary Containment.
- The Permittee shall set up all refueling points with secondary containment.
- The Permittee shall only use stands approved by an Inspector for supporting Fuel Storage Containers that are in use.
- The Permittee shall not allow petroleum products to spread to surrounding lands or watercourses.
- The Permittee shall locate mobile fuel facilities on land when the facilities are stationary for more than 12 hours.
- The Permittee shall mark all Fuel Storage Containers and tanks with the Permittee's name.
- The Permittee shall mark all stationary fuel caches and fuel storage facilities with flags, posts or similar devices so that they are at all times plainly visible to local vehicles traffic.
- The Permittee shall have a maximum of 22,000 litres of fuel stored on the land use site at any time, unless otherwise authorized in writing by the Board.
- Within 10 days of establishment of any fuel cache, the Permittee shall report the location and quantity of the cache in writing to an Inspector and the Board.
- The Permittee shall seal all outlets of Fuel Storage Containers and store the containers on their sides with the outlets located at 3 and 9 o'clock except for containers currently in use.
- Prior to the commencement of operations, the Permittee shall ensure that the spill-response equipment is in place to respond to any potential spills.
- All equipment that may be parked for two hours or more, should have a hazmat/drip tray under it or be sufficiently diapered. Leaky equipment should be repaired immediately.
- The Permittee shall clean up all leaks, spills, and contaminated material.

## **2.4 Purpose & Scope of the Spill Contingency Plan**

This Spill Contingency Plan (the Plan) is designed to provide staff and contractors working at the Selwyn Project with a formal framework of responsibilities and actions to be taken when responding to spills. The Plan is consistent with SCML's Environmental Policy and is intended to

be compliant with the applicable acts, regulations and permits. This Plan has been prepared specifically for levels of operation related to advanced exploration.

This Plan identifies specific lines of authority and responsibility, details the reporting, and communication procedures and outlines an action plan to be implemented in the event of a spill. All information necessary to effectively control and clean up a spill is included in this Plan.

This Plan covers all activities that are undertaken by SCML in the NT, inclusive of mineral claims/leases and the Howard's Pass Access Road. It applies to all staff and contractors working under SCML's direction. This Plan does not apply to contractors or suppliers not working under SCML's direction, such as materials transport firms, who may be required to have Spill Contingency Plans specific to their operations; such plans must be reviewed and accepted by SCML. This Plan was developed specifically for SCML's NT operations; however, the principles of this Plan may, with modification, be applicable to areas beyond.

## **2.5 Distribution of Plan**

This Plan is to be distributed to all staff (casual and permanent) and all contractors prior to the undertaking of work on the lands. Adherence to this Plan is a requirement of employment and of contractor agreements. Staff and contractors will review this Plan and must acknowledge that they have read and understood it.

A copy of this Plan must be kept at centers of operations at the Selwyn Project (Don and XY Camps, any temporary construction camps), at all fuel handling locations, and at the Corporate Office.

This plan is part of the overall Environmental Management System for the Selwyn Project which includes environmental management plans and standard operating procedures. Other plans and procedures related to spill contingency during exploration activities in the Northwest Territories include:

- Comprehensive Waste Management Plan
- Health and Safety Plan
- Working Around Water Standard Operating Procedure
- Drilling Waste Standard Operating Procedure
- Worksite Cleanliness Standard Operating Procedure
- Fuel Handling Standard Operating Procedure

## **2.6 Implementation**

SCML employees, contractors, and subcontractors will receive training which will include instruction in spill recognition and assessment, spill hazards, spill reporting, communications, clean up procedures and general emergency response. All personnel will be familiar with the spill reporting requirements. This training schedule will be set forward by the Environmental Department for SCML in order to maintain the integrity and ability for rapid deployment of the Spill Response Team.

Fuel handling employees will be fully trained in the safe operation of the fuel handling facilities, spill prevention techniques and fully cognizant of the spill reporting procedures. The employees will also undertake regular spill response exercises to test the spill response procedures. The timing and frequency of these exercise is to be determined by the Environmental Department.

This Spill Contingency Plan will be reviewed annually, or when there is a substantial change to operations, or the storage/use of any contaminants not identified in this Plan. Review of this Plan is the responsibility of the Environmental Department.

## 2.7 Training Schedule

<b>Task</b>	<b>Schedule</b>	<b>Scenario</b>	<b>Documentation</b>
Review of Spill Plan	Twice a month and prior to fueling volumes greater than 100 L.	Verbally test employees.	All personnel present. Scenario's practiced and any deviations from the plan.
Review of Protocols	Twice a month and prior to fueling volumes greater than 100 L.	Verbally test employees.	All personnel present. Scenario's practiced and any deviations from the plan noted.
Mock Spill	Minimum- monthly	Mock spills (using food colouring, vegetable oil and water in berms) to clean up spills using different equipment e.g., socks, absorbent pads etc.	All personnel present. Scenario's practiced and any deviations from the plan noted. Any changes required to plans and protocols and/or development of new protocols.
Training will also occur when there is a shift change of 45 % of staff.			

## 2.8 Preventative Measures

SCML believes in using proactive measures to ensure environmental and staff safety. As part of the preventative measures all fuel sources are inspected daily for integrity and leaks by trained environmental monitors. All personal are to follow *SOP – PROT5 – FUEL HANDLING*. Any leaks will be documented and repaired immediately.

## 3.0 CONTAMINANTS & SPILLS - DEFINITIONS AND CATEGORIES

### 3.1 Contaminant Definition

A contaminant is defined in the Northwest Territories Environmental Protection Act as “any noise, heat, vibration or substance and includes such other substance as the Minister may prescribe

- a) endangers the health, safety, or welfare of persons;
- b) interferes or is likely to interfere with normal enjoyment of life or property;
- c) endangers the health of animal life; or
- d) causes or is likely to cause damage to plant life or to property”.

## 3.2 Spill Definition

A spill is defined in the Northwest Territories Spill Contingency Planning and Reporting Regulations as “**a discharge of a contaminant in contravention of the Act or regulations made under the Act or a permit or license made under the Act or regulations made under the Act**”.

### 3.2.1. Reportable (Major) Spills

The NT Spill Contingency Planning and Reporting Regulation defines thresholds for the reporting of spills to the NT Spill Report Line. Thresholds for contaminants commonly stored or used at the Selwyn Project are given below in Table 1. The discharge of a contaminant to the environment in quantities below the thresholds is not considered a spill under the Regulations and is not reportable.

**Note that any amount is reportable if it is: near or in an open water body; near or in a designated sensitive environment or habitat; poses an imminent threat to human health or safety; or poses an imminent threat to a listed species at risk or its critical habitat.**

*Table 1: Contaminant Spill Reporting Thresholds*

Contaminant Spilled	Spill Reporting Threshold
Diesel Fuel	≥ 100 litres
Gasoline	≥ 100 litres
Jet A/B Aviation Fuel	≥ 100 litres
Propane	Any amount from containers with a capacity greater than 100 litres.
Mechanical Lubricants	≥ 100 litres
Special Wastes	≥ 100 litres

### 3.2.2. Non-Reportable (Minor) Spills

Non-reportable spills, or those that fall below reporting thresholds (Table 1) are to be handled in accordance with Initial Actions and Containment and Cleanup of spills described in Sections 5.2 and 5.3 of this Plan, but do not need to be reported to outside agencies.

## 3.3 Fixed Location Storage

Due to the nature of SCML’s operations in the NT, there are no permanent long-term storage facilities for contaminants (such as those with permanent concrete foundations), only mobile containment storage that is deployed temporarily, on an as and where needed basis.

## 4.0 CONTAMINANTS – TYPES, LOCATION & QUANTITIES

### 4.1 Types of Contaminants

Contaminants are defined as any material classified in Schedule B of the Northwest Territories Environmental Protection Act, Spill Contingency Planning and Reporting Regulations (<https://www.justice.gov.nt.ca/en/files/legislation/environmental-protection/environmental-protection.r2.pdf>). The specific contaminants this Plan will address are those which are commonly used and/or stored at the Selwyn Project.

Contaminants used and/or stored at the Selwyn Project include:

- Diesel Fuel (Schedule B, Item 6, TDGA Class 3);
- Gasoline, unleaded (Schedule B, Item 6, TDGA Class 3);
- Jet A / Jet B Aviation Turbine Fuel (Schedule B, Item 6, TDGA Class 3);
- Propane (Schedule B, Item 1, TDGA Class 2.1);
- Lubricants (generally not regulated, treated as TDGA Class 3);
- Special Waste\* (unclassified).

\*For the purposes of this Plan, special wastes generated through operations at the Selwyn Project include waste petroleum fuels (typically stale or contaminated with dirt/water), soil contaminated with hydrocarbons and used lubrication oils. Management of special waste generated as part of SCML's operations in the NT will be handled as part of SCML's Yukon-based operations and are covered under SCML's Waste Management Permit, as issued by Yukon Environment.

### 4.2 Mobile Storage

Mobile storage containers are used to transfer and store fuel where it is required for short-term use (such as drill sites or construction sites), or to refuel mobile heavy equipment. Mobile containers used at the Selwyn Project include:

- 75,000-litre double walled, skid-mounted enviro tanks for storage of diesel fuels.
- 10,000-litre double walled, skid-mounted enviro tanks for storage of gasoline.
- 4,700-litre double-walled, stackable cubes for storage of diesel, gasoline or aviation fuel<sup>1</sup>.
- 3,000-litre double-walled, skid-mounted traveler tanks for storage of diesel, gasoline or aviation fuel.
- 300-litre Tidy Tanks (truck mounted) for transfer of diesel from bulk storage to heavy equipment.
- 205-litre drums for transfer and/or temporary storage of diesel, gasoline or aviation fuel.
- 100 lb (90 litre) propane tanks.

## 5.0 SPILL ACTION PLAN

All spills of contaminants will require immediate action, with priorities of:

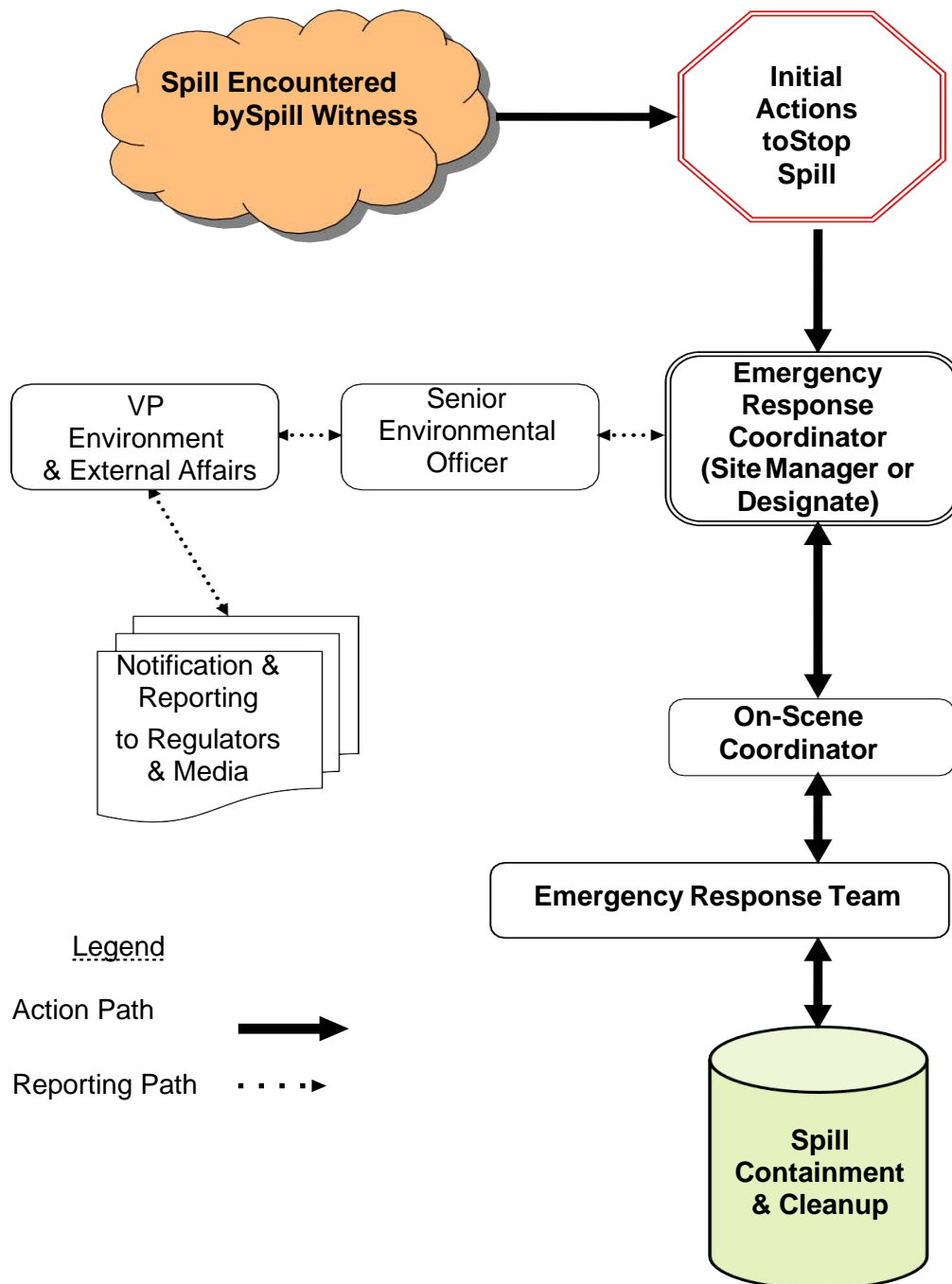
- a) protecting lives and preventing injury;
- b) protecting the environment;
- c) protecting the property; and

- d) minimizing disruption or interference with SCML's business activities.

This Plan is intended to provide guidance for actions to be taken in the event of a spill of contaminants.

### 5.1 Duties & Responsibilities

The flowchart below outlines the responsibilities and procedural sequences of events that will be followed in the event of a reportable spill of a contaminant. Detailed descriptions, duties and responsibilities follow.





**Spill Witness**

The Spill Witness is the individual who first discovers a spill.

**Reports to:** Emergency Response Coordinator.

**Duty Station:** At the spill scene.

**Communication Systems:** 2-way radio and/or portable satellite phone

**General Responsibility:** Implement Initial Actions, as defined in Section 5.2 Initial Action. Participate in spill cleanup as directed by Emergency Response Coordinator or On-Scene Coordinator.

**Emergency Response Coordinator**

The Site Manager stationed at camp will act as the Emergency Response Coordinator. If there is no Site Manager stationed at camp, an alternate will be designated by the VP Environment & External Affairs and this designation will be clearly communicated and documented.

**Reports to:** Senior Environmental Officer.

**Duty Station:** Camp Office.

**Communication Systems:** Satellite Telephone (867) 322-1238 - 2-way radios

**General Responsibility:** Manages all aspects of on-scene emergency response in consultation with the Corporate Office (Manager of Permitting & Regulatory Affairs and/or VP Environment & External Affairs). Devises and directs the implementation of actions necessary to affect the response.

**Specific Duties:**

- Coordinates initial response actions.
- Designates an On-Scene Coordinator.
- Logs the names of individuals assigned to the scene.
- Communicates with the Corporate Office.
- Coordinates all third party (government) visitations to the spill scene.
- Develops secondary response actions in consultation with Corporate Office.
- Arranges for acquisition of additional manpower and/or equipment needed for spill response, in consultation with Corporate Office.
- Controls access on and off the property.
- Receives reports from On-Scene Coordinator.
- Documents all actions taken and all spill-related communications from site.

**On-Scene Coordinator**

**Reports to:** Emergency Response Coordinator.

**Duty Station:** At the spill scene.

**Communication Systems:** 2-way radio and/or portable satellite phone

**General Responsibility:** Implement Action Plan at the scene.

**Specific Duties:**

- Co-ordinates all activities at the spill scene.
- Directs actions of the Emergency Response Team.
- Acts as the point of contact for on-scene technical inquiries.
- Relays information to Emergency Response Coordinator.

**Emergency Response Team**

**Reports to:** On-Scene Coordinator.

**Duty Station:** At the spill scene (as assigned).

**General Responsibility:** Implements Action Plan.

**Specific Duties:** As assigned.

**Senior Environmental Officer**

**Reports to:** VP Environment & External Affairs

**Duty Station:** Whitehorse Office

**Communication Systems:** Office phone & cell phone (see Table 4)

**General Responsibility:** Manages all details of public and regulatory interaction in consultation with the VP Environment & External Affairs

**Specific Duties:**

- Follow up with public and regulatory communications following initial contact by the Emergency Response Coordinator.
- Carry out post spill investigation and report on causative factors, response efficacy, and corrective actions.
- Maintain communications with regulatory officials and public until spill incident file is closed.

**VP Environment & External Affairs**

**Reports to:** President & CEO

**Duty Station:** Corporate Office

**Communication Systems:** Office phone & cell phone (see Table 4)

**General Responsibility:** Provides direction to the Emergency Response Coordinator and arranges for external resources in consultation with the President & CEO.

**Specific Duties:**

- Assist the Emergency Response Coordinator with initial response activity to the extent possible.
- Assists the Emergency Response Coordinator in developing secondary response actions.
- Arranges for external assistance if necessary, including additional manpower and equipment.
- Communication with SCML management team.

## 5.2 Initial Action

These procedures are to be followed by the Spill Witness upon discovery of a spill:

- a) **Ensure Safety First.** Safety of the Spill Witness and others at site is the first priority; warn and/or evacuate personnel if a spill is jeopardizing their safety.
- b) **Prevent Fire.** Shut off ignition sources near the spill if safe to do so.
- c) **Control the spill.** Stop the spill at its point of origin if safe to do so.
- d) **Report the Spill.** Notify the Emergency Response Coordinator (Site Manager or designate).
- e) **Contain the Spill.** Take initial actions to contain the spill if possible and safe to do so.

## 5.3 Containment & Cleanup

All contaminants stored or used at the Selwyn Project that can be contained are liquid phase and hydrocarbon-based (diesel, gasoline, aviation fuel, lubricants and waste derived from them). Propane is gas phase when released, and containment should not be attempted.

Containment methods will depend on spill site factors, including the size of spill, the local terrain and soil type, proximity to water, climatic conditions and availability of manpower and equipment.

All persons involved in containment and cleanup efforts must wear appropriate personal protective equipment (PPE). Material Safety Data Sheets (MSDS) for all contaminants are available at both the XY Camp and Don Camp. The MSDS contain toxicity details for the substances and list appropriate PPE.

Two types of containment and cleanup strategies for hydrocarbon-based contaminants are presented below. They are distinguished based on volatility (gasoline and Jet A/B being most volatile, the remainder less so).

Table 2: Containment & Cleanup – Diesel, Lubricants & Special Waste

Location	Response
On Land	<ul style="list-style-type: none"> <li>• Contain with earthen berm or other barrier(s); block entry into ditches or waterways.</li> <li>• Recover contaminant using appropriate means, including shovels and/or pumps.</li> <li>• Recover residual contaminants with sorbent pads or particulate sorbents.</li> <li>• On tundra use peat moss and leave in place to degrade, if practical.</li> </ul>
On Snow & Ice	<ul style="list-style-type: none"> <li>• Contain with barrier of snow or other material(s), block entry into waterways.</li> <li>• Recover contaminant using appropriate means, including shovels and/or pumps.</li> <li>• Recover residual contaminant with sorbent pads, particulate sorbents and/or snow.</li> <li>• Use ice augers and pump, when feasible, to recover contaminant from under ice.</li> <li>• Burn using Tiger Torches, if unrecoverable by other methods and if feasible and safe to do so.</li> </ul>
On Open Water	<ul style="list-style-type: none"> <li>• Contain spill as close to the point of release as possible.</li> <li>• Use a spill containment boom to concentrate slicks for recovery.</li> <li>• For smaller spills, recover contaminant with sorbent pads.</li> <li>• For larger spills, recover contaminant from within booms by skimming.</li> </ul>
Creeks & Streams	<ul style="list-style-type: none"> <li>• Prevent entry into water, if possible, by building an earthen berm or trench.</li> <li>• Intercept moving slicks in slow moving water using sorbent pads or booms.</li> <li>• Do not use sorbent booms/pads in fast moving water.</li> </ul>
Disposal	<ul style="list-style-type: none"> <li>• Segregate waste types.</li> <li>• Place contaminated materials into appropriate containers (typically drums) and clearly mark the contents.</li> <li>• Store outside &amp; away from ignition sources.</li> <li>• Consult VP Environment &amp; External Affairs on any post spill requirements.</li> </ul>

Table 3: Containment & Cleanup – Gasoline & Jet A/B Aviation Fuel

Location	Response
On Land	<ul style="list-style-type: none"> <li>• Block entry into waterways by dyking with earthen berm or other barrier.</li> <li>• Do not contain spill if there is any chance of igniting vapors.</li> <li>• On shop floors, work yards and gravel roads use particulate sorbents.</li> <li>• On tundra use peat moss and leave to degrade if feasible to do so.</li> </ul>
On Snow & Ice	<ul style="list-style-type: none"> <li>• Block entry into waterways by dyking with snow or other barrier(s).</li> <li>• Do not contain spill if there is any chance of igniting vapors.</li> <li>• In work yards apply particulate sorbents.</li> </ul>
On Water	<ul style="list-style-type: none"> <li>• Do not attempt to contain or remove spills.</li> <li>• Use booms to protect water intakes and sensitive areas.</li> </ul>
Transfer	<ul style="list-style-type: none"> <li>• Electrically ground containers and vehicles during transfer to designated disposal/treatment area.</li> </ul>
Disposal	<ul style="list-style-type: none"> <li>• Segregate waste types.</li> <li>• Place contaminated materials into appropriate containers (typically drums) and clearly mark the contents.</li> <li>• Store in cool ventilated area outside &amp; away from ignition sources.</li> <li>• Consult VP Environment &amp; External Affairs on any post spill requirements.</li> </ul>

### 5.4 Spill Reporting – Major Spills

A spill of a contaminant that exceeds thresholds in the NT Spill Contingency Planning and Reporting Regulations (see Table 1) must be reported. Initial spill reporting is to be undertaken by the VP Environment & External Affairs or designate and must be made to the NT **24 Hour Spill Report Line by calling (867) 920-8130**. A person reporting a spill shall give as much of the following information as possible:

- a) date and time of spill;
- b) location of spill;
- c) direction spill is moving;
- d) name and phone number of a contact person close to the location of spill;
- e) type of contaminant spilled and quantity spilled;
- f) cause of spill;
- g) whether spill is continuing or has stopped;
- h) description of existing containment;
- i) action taken to contain, recover, clean up and dispose of spilled contaminant;

- j) name, address and phone number of person reporting spill; and
- k) name of owner or person in charge, management, or control of contaminants at time of spill.

To assist in ensuring that all the appropriate information is collected prior to the reporting of a spill, a NT-NU Spill Report form (Appendix I) should be completed by the Emergency Response Coordinator or his/her designate. The NT-NU Spill Report Form is also available at <http://www.gov.nu.ca/sites/default/files/NT%20NU%20Spill%20Report%20Form.pdf>.

Information from this form can also be used as a guide for the detailed spill report that will be written by the Emergency Response Coordinator.

*Table 4: SCML Staff Contact Information*

<b>Position</b>	<b>Name</b>	<b>Office Phone</b>	<b>Cell Phone</b>
President & CEO	Shi Huang	(604) 620-6188	
VP Environment & External Affairs (Vacant) Designate: A/VP Exploration	Gabe Xue	(604) 620-6188	778-839-3428
Senior Environmental Officer (Consultant)	Sukie Sidhu	(867) 390-2048	(867) 336-3825

Table 5: Government Contact Information

Agency	Phone	Email
*NT Spill Report Line (24 hrs)	(867) 920-8130	spills@gov.nt.ca
Environment Canada's National Environmental Emergency Centre	1-866-283-2333	
Fisheries & Oceans Canada, Yellowknife (if spill to water)	(867) 669-4900	
*Nahanni National Park Reserve, FortSimpson (spill in Park)	(867) 695-7750 (867) 695-3732 (Summer 24 hr number)	<a href="mailto:nahanni.info@pc.gc.ca">nahanni.info@pc.gc.ca</a>
INAC, Fort Simpson (spill outside Park)	(867) 695-2626	

\*Notification of a reportable spill to this agency is required by law.

### 5.5 Spill Reporting – Minor Spills

All minor spills – those greater than 1 litre but less than 100 litres - are to be recorded in a spill log with a spill investigation occurring immediately after the spill is contained. An SCML Spill Log and Record (Appendix II) are to be used to record details of reportable and non-reportable spills. This log is to be maintained at the nearest center of operations and is to be made available to regulators on request.

### 5.6 Managing Spill-Related Wastes

Spill-related wastes will be managed on a case-by-case basis at the discretion of VP Environment & External Affairs. Common management options for spill-related wastes are provided below in Table 6.

*Table 6: Management of Spill-Related Waste*

<b>Waste</b>	<b>Management Options</b>
Hydrocarbon-water mixture	<ul style="list-style-type: none"> <li>• Reclaim hydrocarbon from mixture by gravimetric means.</li> <li>• Hydrocarbon can be incinerated at dump or can be fed into waste oil burner at Don Camp.</li> </ul>
Hydrocarbon-snow mixture	<ul style="list-style-type: none"> <li>• Mixture can be burned as is with refuse at dump.</li> <li>• Mixture can be stored in berm, pumped to barrel when thawed, then separated and burned.</li> </ul>
Hydrocarbon-soil mixture	<ul style="list-style-type: none"> <li>• Mixture can be burned with refuse at dump.</li> <li>• Mixture can be land farmed.</li> </ul>
Hydrocarbon-soaked sorbents	<ul style="list-style-type: none"> <li>• Sorbents can be burned with refuse at dump.</li> </ul>

### **5.7 Restoring Areas Affected by Spills**

Restoration of areas affected by spills of contaminants will be undertaken on a site-specific basis as required. A workplan will be provided to the NT inspector which will include restoration planning, implementation and monitoring specific to each case.

## **6.0 SPILL RESPONSE RESOURCES**

### **6.1 On-Site Resources**

Spill kits are kept at all fixed storage locations for contaminants at Don and XY Camps. Spill kits are also kept onboard of vehicles used to transport contaminants and at sites where contaminants are temporarily stored (such as drill sites).

Spill kit types and contents are provided below in Table 7.



Table 7: Spill Kit Contents

Spill Kit	Contents
#1 Kit	<ul style="list-style-type: none"> <li>• 100 oil sorbent pads</li> <li>• 6 small pillows</li> <li>• 2 large pillows</li> <li>• 5 – 10' socks</li> <li>• 25 lb bag granular sorbent</li> <li>• plug pattie (instant leak stop)</li> <li>• neoprene drain cover</li> <li>• 2 disposal bags</li> <li>• splash goggles</li> <li>• nitrile gloves</li> <li>• 2 shovels</li> <li>• 1 rake</li> <li>• 2 plastic tarps</li> <li>• poly-coated Tyvek suit</li> <li>• disposable respirator</li> </ul>
#2 Kit	<ul style="list-style-type: none"> <li>• 50 oil sorbent pads</li> <li>• 4 small pillows</li> <li>• 2 large pillows</li> <li>• 4 - 4' socks</li> <li>• 1 – 8' sock</li> <li>• plug pattie (instant leak stop)</li> <li>• 2 disposal bags</li> <li>• pr nitrile gloves</li> <li>• 1 shovel</li> <li>• 1 plastic tarp</li> <li>• splash goggles</li> <li>• disposable respirator</li> </ul>
Truck Kit	<ul style="list-style-type: none"> <li>• 24 oil sorbent pads</li> <li>• 2 small pillows</li> <li>• 2 - 4' socks</li> <li>• plug pattie (instant leak stop)</li> <li>• disposal bags</li> <li>• pr nitrile gloves</li> <li>• 1 plastic tarp</li> </ul>

Hand-operated tools such as shovels and rakes are invaluable in any spill clean-up and recovery operation and are kept with the #1 and #2 kits. The use of heavy equipment, such as excavators and haul trucks, for larger spill situations makes the removal of material easier. It also ensures

that all materials, including absorbent soil, snow etc. have been removed from the site.

## 6.2 Off-Site Resources

Off-site resources that may be able to provide assistance to SCML in responding to a major spill are listed below in Table 8.

Table 8: Off-Site Spill Response Resources

Resource	Phone	Fax
Spill Response Products		
West Coast Spill Supplies	(250) 652-4549	(250) 652-5052
Raymac Environmental	(250) 390-1032	(250) 390-1051
Yukon Pump	(867) 633-3478	-
Air Transport		
Alkan Air (fixed wing)	(867) 668-2107	(867) 667-6617
Trans North Helicopters	(867) 668-2177	(867) 668-3420
Horizon Helicopters	(867) 633-6044	(867) 666-6045
Technical Support		
*Canutec - emergency	(613) 996-6666	-
*Canutec - information	(613) 992-4624	(613) 954-5105

\*Canutec is the Canadian Transport Emergency Centre operated by Transport Canada to assist emergency response personnel in handling dangerous goods emergencies. Canutec has set up a scientific data bank on chemicals manufactured, stored and transported in Canada and is staffed by professional scientists specialized in emergency response and experienced in interpreting technical information and providing advice.

Taking into consideration the characteristics of the dangerous goods involved and the particular conditions at the emergency site, Canutec's professional staff can provide immediate advice on:

- chemical, physical and toxicological properties and incompatibilities of the dangerous goods;
- health hazards and first aid;
- fire, explosion, spill or leak hazards;
- remedial actions for the protection of life, property and the environment;
- evacuation distances;
- personal protective clothing and decontamination.

## **7.0 MONITORING AND EVALUATION**

During exploration drilling, the Environmental Department monitors spills and spill response through internal reporting and through routine checks around site. Weekly reports are prepared that document the required actions, corrective actions, and completion of any non-conformances to the environmental management plans and procedures. A spill log is kept on site to track all minor and major spills.

The Spill Contingency Plan is reviewed annually and revised when required, for example, from spill events, non-conformances, regulatory or agency guidance changes, activity or permit changes.

## **Appendix I**

### **NT Spill Report Form**



Canada

# NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORTLINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH- DAY- YEAR	REPORT TIME	<input type="checkbox"/> ORIGINAL SPILL REPORT, OR		REPORT NUMBER - -
	OCURRENCE DATE: MONTH- DAY- YEAR	OCURRENCE TIME	<input type="checkbox"/> UPDATE #		
<b>B</b>	LAND USE PERMIT NUMBER (IF APPLICABLE)		WATER LICENCE NUMBER (IF APPLICABLE)		
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION   REGION				
<b>C</b>	LATITUDE   LONGITUDE				
	ELEVATION   ALTITUDE   ADJACENT JURISDICTION OR OCEAN				
<b>D</b>	VESSEL NAME		REGISTRY ADDRESS OR OFFICE LOCATION		
	VESSEL TYPE		VESSEL TYPE		
<b>E</b>	VESSEL TYPE		VESSEL TYPE		
	VESSEL TYPE		VESSEL TYPE		
<b>F</b>	VESSEL TYPE		VESSEL TYPE		
	VESSEL TYPE		VESSEL TYPE		
<b>G</b>	VESSEL TYPE		VESSEL TYPE		
	VESSEL TYPE		VESSEL TYPE		
<b>H</b>	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		
<b>I</b>	SPILL SOURCE	SPILL CAUSE	AREA OF CONTAMINATION IN SQUARE METRES		
	FACTORS AFFECTING SPILL OR RECOVERY	DESCRIBE ANY ASSISTANCE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT		
<b>J</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS				
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS				
<b>K</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS				
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS				
<b>L</b>	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE
	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT	ALTERNATE TELEPHONE
<b>REPORT LINE USE ONLY</b>					
<b>M</b>	RECEIVED AT SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLED	REPORT LINE NUMBER
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> OTC	SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOW N		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED	
AGENCY	CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					

## **Appendix II**

### **SCML Spill Log and Record**

## Spill Record Non-Reportable

Selwyn Chihong Mining			Log #	SP-MM/DD/YR
Howards Pass		Date of Spill	Date Reported	Date of Investigation if required
Reported By	Reported To	Time of Spill	Time Reported	Date Submitted
		Reportable to Spill Line - Yes/No		
		Yukon Spill Line 24/7 - 867-867-7244      NT Spill Line - (867) 920-8130		
TYPE OF MISHAP <span style="float: right;">Multiple Selections Possible</span>				
Spill Incident				
Spill Type	Location of Spill (Ex. Don Parking lot)	Volume Spilled (L)	Remedial Action (check all that apply)	Pictures
DIESEL			GATOR	YES
WATER			SCRAPPING (retO'Clr. (le'Olal'	NO
GAS			ESRC, eoeiowd	
OTHER (describe below)				

Distance to closest water source	OCCUPATION of person who reported spill:	YRS OF EXPERIENCE IN OCCUPATION:	
DESCRIBE HOW THE SPILL OCCURRED; Include what the person(s) was doing, trying to do and anything unusual:			
PREVENTATIVE ACTION IMPLEMENTED OR TO BE IMPLEMENTED:			
	PERSON DEP. ON SITE	DATE TO BE COMPLETED	DATE COMPLETED
COMMENTS		SIGNATURE	TITLE
			DATE
		Employee	
		Environmental	
		Monitor	

Note: Area shaded in blue indicates required information, page number in red.

Additional pages are required to ensure that the information is complete.

### Reportable and Non-Reportable Spill Log

Report Log Number	Reported 8)	Date/Time	Location (Description and GPS)	Substance	Quantity	Distance to nearest watercourse	Incident/Remedial Measure Taken	Pictures Taken?	Investigated by	Comments
<ul style="list-style-type: none"> <li>• ALL SPILLS must be investigated using the spill report template.</li> </ul> <p>""For Spills greater than 200 L for diesel, gasoline, jet fuel, lubricants and special wastes, REFER TO THE SPILL CONTINGENCY PLAN.            ""For propane spills of any amount from a 100 L container, REFER TO THE SPILL CONTINGENCY PLAN.</p>										