



BC EAO EAC Application – Tenas Project

Section 13.0 Management Plans

Chapter 7 Fuel Management and Spill Control Plan

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Tenas Project

Section 13.0 Management Plans Chapter 7 Fuel Management and Spill Control Plan

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ABBREVIATIONS AND ACRONYMS

Abbreviation or Acronym	Long Form of Abbreviation or Acronym
ANFO	ammonium nitrate fuel oil
ATV	all terrain vehicle
BC	British Columbia
BC MECCS	British Columbia Ministry of Environment and Climate Change Strategy
BC MEMLI	British Columbia Ministry of Energy, Mines and Low Carbon Innovation
BMPs	best management practices
C	Chapter
CCME	Canadian Council of Ministers of the Environment
CEMP	Construction Environmental Management Plan (S13.0-C4)
CMSTHP	Chemicals and Materials, Storage, Transfer, and Handling Plan (S13.0-C3)
Code	Health, Safety and Reclamation Code in British Columbia (British Columbia Ministry of Energy, Mines and Low Carbon Innovation [BC MEMLI] 2021)
CPP	Coal Processing Plant
EAC	Environmental Assessment Certificate
EMBC	Emergency Management British Columbia
EMP	Explosives Management Plan (S13.0-C6)
EMS	Environmental Management System (S13.0-C1)
ERT	Emergency Response Team
FMSCP	Fuel Management and Spill Control Plan (S13.0-C7)
GovBC	Government of British Columbia
GovCan	Government of Canada
JAIR	Joint Application Information Requirements for Mines Act and Environmental Management Act Permits (British Columbia Ministry of Energy, Mines and Petroleum Resources [BC MEMPR] and British Columbia Ministry of Environment and Climate Change Strategy [BC MECCS] 2019).
MA/EMA	<i>Mines Act</i> , RSBC 1996, c 293, and <i>Environmental Management Act</i> , SBC 2003, c 53
MIBC	methyl isobutyl carbinol
MERP	Mine Emergency Response Plan (S13.0-C9)
MOC	Management of Change
MSDS	Material Safety Data Sheet
MWMP	Minesite Water Management Plan (S13.0-C11)
PEP	Provincial Emergency Program
PPE	Personal Protective Equipment
Project	Tenas Project

Abbreviation or Acronym	Long Form of Abbreviation or Acronym
PVC	Polyvinyl chloride
RCP	Reclamation and Closure Plan (S13.0-C15)
S	Section
SEMP	Socio-economic Management Plan (S13.0-C16)
SPP	Standard Practices and Procedures
TAC	Tenas Access Corridor
TCL	Telkwa Coal Limited
TDG	Transportation of Dangerous Goods
WHMIS	Workplace Hazardous Materials Information System
WMPRE	Waste Management Plan for Refuse and Emissions (S13.0-C20)

UNITS OF MEASURE

Abbreviation or Acronym	Long Form of Abbreviation or Acronym
%	percent
>	greater than
'	foot
"	inch
kg	kilogram
L	litre
m	metre
m ³	cubic metre

EXECUTIVE SUMMARY

This Fuel Management and Spill Control Plan (FMSCP) outlines the following:

- ▶ fuel (hydrocarbons including diesel, gasoline, lubricants, and coolant{glycol}) handling and transportation;
- ▶ dispensing and storage facilities and related equipment; and
- ▶ procedures regarding fuel management and spill control to be followed at the Minesite.

This FMSCP was developed using the following regulations and codes:

- ▶ BC Building and Fire Codes (Government of British Columbia [GovBC] 2018a, b);
- ▶ *Environmental Management Act*, SBC 2003, c 53 (GovBC 2003);
- ▶ Petroleum Storage and Distribution Facilities Storm Water Regulation, BC Reg 168/94 (GovBC 1994); and
- ▶ Spill Reporting Regulation, BC Reg 187/2017 (GovBC 2017).

Additional information is provided by the **Mine Emergency Response Plan (Section [S] 13.0-Chapter [C] 9) (MERP)** which was prepared in accordance with regulatory requirements. This FMSCP provides the system for prevention and management of spills onsite as well as product transportation routes to the Minesite within the Project's Area. Reporting requirements to regulators are included, as necessary.

This FMSCP is designed to fulfill the guidance provided by provincial and federal statutes and best management practices (BMPs), the Project's Environmental Assessment Certificate (EAC), and the Joint Application Information Requirements for *Mines Act* and *Environmental Management Act* Permits (British Columbia Ministry of Energy, Mines and Petroleum Resources [BC MEMPR] and British Columbia Ministry of Environment and Climate Change Strategy [BC MECCS] 2019) (JAIR) and the resulting *Mines Act*, RSBC 1996, c 293 and *Environmental Management Act*, SBC 2003, c 53 (MA/EMA) permits.

Management of fuel and spills at the Project is important for the safety of personnel onsite, and for the protection of the environment during all Project phases. Through implementation of this FMSCP and relevant Standard Practices and Procedures (SPPs), Telkwa Coal Limited (TCL) will ensure the proper fuel management and spill control procedures.

1. INTRODUCTION

The Fuel Management and Spill Control Plan (FMSCP) describes the processes and procedures in place at the Tenas Project (Project) for addressing fuel management and spill control. The FMSCP will remain in place during the Construction, Operation, Decommissioning and Reclamation, and Post-closure phases of the Project, and will be subject to ongoing management review and revisions as required.

The Project will require various fuels to allow mining to be accomplished onsite. This FMSCP describes the processes and procedures associated with handling fuels and related hydrocarbons for the Project to mitigate potential effects, ensure the safety of personnel, and the protection of the environment.

2. PURPOSE AND OBJECTIVES

This FMSCP applies to construction, operation, and maintenance activities where fuel (hydrocarbons) and other materials are handled and where spills of dangerous and/or hazardous substances could occur with potential for release into the environment.

In the Construction Phase, the FMSCP and **Construction Environmental Management Plan (Section [S] 13.0-Chapter [C] 4) (CEMP)** will be utilized to ensure contractors and Telkwa Coal Limited (TCL) employees manage fuels appropriately, and when necessary, complete proper spill response, cleanup, and reporting. This FMSCP will enable site personnel in the Operation, Reclamation and Decommissioning and Post-closure phases to be prepared to handle fuel and respond to a spill.

This FMSCP is just one (1) component of an overarching **Environmental Management System (S13.0-C1) (EMS)** for the Project.

TCL has developed the following objectives for the FMSCP which will:

- ▶ provide effective, suitable direction and training to employees regarding fuel management (transporting, handling, and storing fuel and lubricant products), and spill contingencies (containment, reporting and/or cleanup of spilled material);
- ▶ ensure that practices reduce risk and impacts to human safety and protect the environment from accidental releases;
- ▶ promote the safe and effective recovery or disposal of spilled materials, including addressing risk of fires and explosions; and
- ▶ comply with provincial and federal requirements pertaining to contingency planning and reporting.

This FMSCP is designed to fulfill the guidance provided by the provincial Spill Reporting Regulations, BC Reg 187/2017 (GovBC 2017), and Spill Reporting fact sheet (British Columbia Ministry of Environment and Climate Change Strategy [BC MECCS] 2021), and federal Transportation of Dangerous Goods Regulations, SOR/2001-286 (Government of Canada [GovCan] 2001), and statutes, and best management practices (BMPs), the Joint Application Information Requirements for *Mines Act* and *Environmental Management Act* Permits (British Columbia Ministry of Energy, Mines and Petroleum Resources [BC MEMPR] and BC MECCS 2019) (JAIR) *Mines Act*, RSBC 1996, c 293, and *Environmental Management Act*, SBC 2003, c 53 (MA/EMA) permit. As such, it is expected to exceed the requirements for the Environmental Assessment Certificate (EAC) Application.

This FMSCP consists of two (2) distinct parts:

1. strategy for the management of the handling, transportation, and storage of solid and liquid fuels and hydrocarbons to reduce the risk of spills that might adversely affect people and the environment; and
2. plan for the emergency response to all potential spills of fuel, hydrocarbons and other materials that will be located onsite.

3. SCOPE AND SCALE

The scope of this FMSCP is defined within the Project Area and includes all activities, as well as any operation and/or construction activities that are directly associated with the operations and exist outside of the Project Area. The FMSCP is in effect during all Project phases and ceases to be in force at the final closure of the Project as approved by the regulatory authorities.

This FMSCP provides fuel management requirements and practices that will be utilized at the Project. In event of a spill, both regulatory and corporate reporting will be completed. The **Incident Notification and Incident Investigation Report Forms (Appendix 13.7-A)** will be used for spills onsite to ensure consistent alerting, notification and responsibilities are maintained. In addition to these forms, which are used for any type of Incident onsite, a specific **Spill Report Form (Appendix 13.7-B)** will also be used for spills.

4. COMPLIANCE OBLIGATIONS

This subsection will summarize the relevant compliance approvals and requirements that the FMSCP needs to address.

4.1 Regulatory Requirements

Several legislative and regulatory requirements are applicable to the storage and handling of fuel, and response to accidental spills and emergency planning. Additional guidance documents provide information. A short list of these and their major applicable components are provided in **Table 4.1-1** below.

Table 4.1-1: Legislation, Regulation and Guidelines Relevant to Fuel Management and Spill Control Plan (FMSCP)

Legislation, Regulations, and Guidelines	Applicable Information
A Field Guide to Fuel Handling, Transportation and Storage - 3rd Edition (British Columbia Ministry of Water, Land and Air Protection [BC MWLAP] 2002)	Provides guidance on acceptable industry practice for managing fuel handling, transportation, and storage in rural and remote areas of British Columbia (BC). It summarizes requirements of applicable statutes of Canada and BC, industry codes of practice and recommendations relating to environmental protection, health and safety, and fire protection.
BC Building Code - 2018 (Government of British Columbia [GovBC] 2018)	Governs how new construction, building alterations, repairs and demolitions are completed. This code establishes minimum requirements for safety, health, accessibility, fire and structural protection of buildings and energy and water efficiency.
BC Fire Code - 2019 (GovBC 2018)	Provides technical requirements for the construction, use or demolition of buildings and facilities and the design, construction, and use of specific elements of facilities related to certain fire hazards, and protection measures.
<i>Canadian Environmental Protection Act</i> , SC 1999, c 33, Environmental Emergency Regulations, SOR/2019-51 (GovCan 2019)	Requires preparation of an Environmental Emergency Plan
Contaminated Sites Regulation, BC Reg 375/96 (GovBC 1996)	Specifies standards on how contaminated sites are to be remediated and managed, excepting mined materials.
Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products (Canadian Council of Ministers of the Environment [CCME] 2003)	Provides technical requirements for registration and approval of storage tank systems, design and installation of new storage tanks and piping, monitoring, and leak detection, upgrading of existing systems, operation and maintenance, and the withdrawal from service of storage tank systems.
<i>Environmental Management Act</i> , SBC 2003, c 53 (Government of British Columbia [GovBC] 2003) (EMA)	Provides overall direction on how hazardous materials are to be managed
<i>Fisheries Act</i> , 1985, c F-14 (Government of Canada [GovCan] 1985)	Prohibits the release of a deleterious substance to fish habitat

Legislation, Regulations, and Guidelines	Applicable Information
Fuel Guidelines, 9th Edition - March 2020 (Northwest Response Ltd. 2020)	This guide summarizes the industry standards for fuel storage, handling, and transportation to meet due diligence as it relates to prevention.
Hazardous Waste Regulation, BC Reg. 63/88 (GovBC 1988)	Provides overall direction on how hazardous wastes are to be handled, stored, transported, treated, and disposed.
Health, Safety and Reclamation Code for Mines in British Columbia (British Columbia Ministry of Energy, Mines and Low Carbon Innovation [BC MEMLI] 2021) (Code)	Specifies Mine Manager requirements for hazardous materials labelling and worker education and Workplace Hazardous Materials Information System (WHMIS) requirements such as appropriate labels of containers of hazardous substances, requirement for material safety data sheets (MSDS), and worker education and training.
Petroleum Storage and Distribution Facilities Storm Water Regulation, BC Reg 168/94 (GovBC 1994)	Registration of cumulative volume of tanks greater than (>) 100,000 litres (L) and management of separator systems.
Spill Preparedness, Response and Recovery Regulation, BC Reg 185/2017 (GovBC 2017)	Outlines definition of a regulated person, requires spill preparedness plans and allows recovery of costs of government spill response
Spill Reporting Regulation, BC Reg 187/2017 (GovBC 2017)	Stipulates threshold limits requiring reporting
Spill Reporting. Facts On The Management of Environmental Emergencies (British Columbia Ministry of Environment and Climate Change Strategy [BC MECCS] 2021).	Provides information for responsible persons on their reporting obligations should they be in possession, charge, or control of a substance when it spills or is at imminent risk of spilling.
Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, SOR/2008-197 (GovCan 2008)	Provides design and installation of storage tank systems under federal jurisdiction and include requirements for operation, maintenance, removal, reporting and record-keeping.
Transportation of Dangerous Goods Regulations, SOR/2001-286 (GovCan 2001) of the <i>Transportation of Dangerous Goods Act</i> , SC 1992, c 34 (GovCan 1992)	Includes a substance classification system and specifies requirements for transportation of dangerous goods to Project

Section 9.14 of the JAIR for MA/EMA permits provide direction on the objectives for a FMSCP. This FMSCP outlines the following:

- ▶ fuel handling and transportation;
- ▶ dispensing and storage facilities and related equipment; and
- ▶ procedures regarding fuel management and spill control to be followed at the Minesite during Construction, and Operation phase activities.

The following regulations and codes were reviewed when developing the FMSCP:

- ▶ BC Building and Fire Codes (GovBC 2018a, b);
- ▶ *Environmental Management Act*, SBC 2003, c 53 (GovBC 2003);

- ▶ Petroleum Storage and Distribution Facilities Storm Water Regulation, BC Reg 168/94 (GovBC 1994); and
- ▶ Spill Reporting Regulation, BC Reg 187/2017 (GovBC 2017).

This FMSCP includes Spill Response Plans prepared in accordance with regulatory requirements, for the prevention and management of spills within the Project's Area and on product transportation routes. TCL has developed a contingency plan for preventing, minimising, and containing spills. The FMSCP also includes plans for process upsets and non-compliant discharges (e.g., collection ponds with pump-back systems, back-up treatment systems).

4.2 Standard Practices and Procedures (SPPs)

TCL Standard Practices and Procedures (SPPs) will conform to the British Columbia Health, Safety and Reclamation Code for Mines in British Columbia (British Columbia Ministry of Energy, Mines and Low Carbon Innovation [BC MEMLI] 2021) (Code).

In addition to regulatory requirements, the Project will implement SPPs that meet or exceed the required laws and regulations.

5. RELATIONSHIP TO OTHER MANAGEMENT PLANS

The Project is governed by an **EMS**, an overarching management plan strategy comprising a set of processes and practices which enable TCL to manage its environmental and safety performance in a holistic way, within an integrated framework. While the management plans are part of the **EMS**, the **EMS** is not just a collection of management plans.

In addition to the overall guidance of the **EMS**, this FMSCP has a relationship with other management plans that also present mitigation measures. Those management plans and their relationship to this FMSCP are listed in **Table 5-1**.

Table 5-1: Management Plans with Relationship to the Fuel Management and Spill Control Plan (FMSCP)

Management Plans	Nature of Relationship
Environmental Management System (S13.0-C1) (EMS)	All management plans are part of the EMS.
Chemicals and Materials, Storage, Transfer, and Handling Plan (S13.0-C3) (CMSTHP)	Storage and handling of fuels is part of the CMSTHP.
Construction Environmental Management Plan (S13.0-C4) (CEMP)	Construction Phase management of mobile equipment spill response and reporting refers to the CEMP.
Explosives Management Plan (S13.0-C6) (EMP)	Explosive spill response and reporting utilize the spill response plan provided in this plan as part of this EMP.
Mine Emergency Response Plan (S13.0-C9) (MERP)	Spill response and reporting is contained within the MERP
Minesite Water Management Plan (S13.0-C11) (MWMP)	Spill prevention, response, and reporting near waterbodies is governed by the MWMP.
Reclamation and Closure Plan (S13.0-C15) (RCP)	Prevention of and response to spills during the Decommissioning and Reclamation, and Post-closure phases.
Waste Management Plan for Refuse and Emissions (S13.0-C20) (WMPRE)	Hydrocarbon waste storage and management of hydrocarbon spill affected soils are contained in the WMPRE.

6. DETAILS OF FUEL MANAGEMENT AND SPILL CONTROL PLAN (FMSCP)

6.1 Overview of Management Strategy

The preparation of this FMSCP incorporates several assumptions. These assumptions include:

- ▶ BMPs have been adopted as the default tools for this FMSCP; and
- ▶ ensure appropriate fuel storage and spill management procedures in all phases of the Project will be in place.

This FMSCP is intended to provide guidance on spill prevention, initial spill response and follow-up, as well as outline spill-related emergency response plan for the Project. Actions will be outlined to avoid, control and/or mitigate spills, and releases of hydrocarbons (e.g., fuels, lubricants, used lubricants, hydraulic fluids, etc.) into the environment, which could contaminate soil, surface water, groundwater, fish, vegetation, or wildlife habitat.

Response to a spill must be immediate and effective such that personnel, property, and environmental hazards are minimized.

6.2 Fuel and Hydrocarbon Management

The preferred manner to deal with spills is avoidance through appropriate storage, handling, and transportation measures. The prevention of spills is achieved through the implementation of initiatives such as:

- ▶ designing facilities to incorporate BMPs for spill containment including double-walled hydrocarbon storage tanks capable of storing 100 percent (%) of their contents and dangerous or hazardous products, with protective barriers where there is potential for impact from equipment or vehicles;
- ▶ having secondary containment with capacity to accommodate 100% of the largest vessel in the area plus 10% of the remaining aggregate storage containers within the same area when they are not double-walled; and separate storage systems for storage of incompatible products;
- ▶ at aboveground tank systems, tanks with a volume over 100,000 L will be registered, and oil/water separators will be installed at these fueling areas;
- ▶ completing a **Risk Assessment Matrix** for all land-based fuel and hydrocarbon storage facilities. See **Appendix 13.7-C** for details of the risk assessment information that will be followed;
- ▶ providing adequate training to all personnel that are transporting and transferring fuels and hydrocarbons;
- ▶ only having designated and approved personnel and facilities for the handling, transferring, and storage of fuel and hydrocarbons, and
- ▶ documenting operational procedures for tasks that have an identified risk such as fuel and hydrocarbon handling and spill response.

To ensure that potential effects to the environment are reduced from fuel and hydrocarbon handling, the following steps will be taken to ensure that the fuel and hydrocarbon storage areas are constructed and operated in an environmentally sound manner. Some things that will be undertaken are listed below.

- ▶ Hydrocarbon storage areas will meet requirements of the BC Fire Code (GovBC] 2018b) and pertinent recommendations from the document BC Fuel Guidelines, 9th Edition – 2020 (Northwest Response Ltd. 2020);
- ▶ Hydrocarbon storage containers including permanent storage tanks will meet Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, SOR/2008-197 (GovCan 2008) specifications;
- ▶ Machinery shall only be serviced, refuelled, and washed in designated areas, located at a minimum of 30 metres (m) away from any identified watercourse and/or wetland;
- ▶ Fuel and hydrocarbon storage tanks will be protected by either a rock berm, concrete lock block barriers or steel posts driven at least 1 m into the ground;
- ▶ When fueling of equipment takes place, the operator will remain at the fuel station to prevent overfilling and resultant spills. No operators will fill their equipment or containers beyond their safe filling leveling (95%). If spills result and an operator leaves the station, the operator will immediately face the disciplinary process at TCL;
- ▶ Fueling stations will have gravel pads for fueling vehicles and utilize BMPs for spills. At heavy mining vehicle fueling areas, a geomembrane will be installed below the designated fueling location to catch any spills due to fueling incidents;
- ▶ When not in use, fuel and hydrocarbon hoses will be stored in their appropriate locations and have drip containment measures;
- ▶ Fuel and hydrocarbon supply from the storage tank will be controlled by a normally fail-safe closed valve for any nozzles below normal liquid level;
- ▶ Storage tank interstitial spaces will have required monitoring with yearly testing requirements;
- ▶ Fuel and hydrocarbon hoses will be equipped with “break-away” connectors to ensure that there is no spillage in the event of a hose break due to a piece of equipment leaving the fueling station with the nozzle attached;
- ▶ Inventory tracking will be employed to account for unexplained losses from tanks, and equipment and follow-up will be conducted;
- ▶ Appropriately sized and equipped emergency spill cleanup kits will be located at the fueling station, and all operators will be trained in their use;
- ▶ Fuel stations will have appropriate safety warning devices to avoid overfilling of tanks;
- ▶ Fire extinguishers will be placed at appropriate locations around the fueling areas;
- ▶ The fuel and hydrocarbon supplier will be required to have trained operators, and they will be required to stay at the tank while filling operations are underway and monitor fuel and hydrocarbon supply safety equipment;
- ▶ Fueling away from the fuel stations will be minimized and if needed, fueling being undertaken will use the same precautions as utilized as fueling at an fueling station;
- ▶ Maximizing fuel and hydrocarbon containment will be accomplished by incorporating drip containment measures for fuel and hydrocarbon dispensing equipment including during services;
- ▶ Certification of vehicles and drivers for Transportation of Dangerous Goods (TDG) to be verified as required;
- ▶ Personnel will ensure equipment arrives onsite in a clean condition and is maintained free of fluid leaks;

- ▶ Personnel will ensure equipment is in a clean conditions and maintained free of fluid leaks during the inspections conducted during each shift, preventative maintenance sessions, and servicing at the fueling stations;
- ▶ Monitoring of vehicles and equipment for leaks will be done on a regular basis;
- ▶ Personnel will ensure that vehicle cargos are adequately contained and secured;
- ▶ A preventative maintenance program will be implemented and documented;
- ▶ There will be a documented inspection schedule and procedures for dangerous goods and hazardous materials storage sites;
- ▶ Regular housekeeping and environmental audits of facilities will be done to ensure maximum protection is in place;
- ▶ A risk assessment program for identifying vulnerabilities and management of improvements will be in place; and
- ▶ Spill response requirements will be communicated to all employees and contractors at the start of work (induction) and thereafter at regular intervals, which will be strictly enforced.

6.2.1 Hydrocarbon Products

Hydrocarbon products will be used and stored at several locations around the Project. Spills may occur in the following locations:

- ▶ along the Tenas Access Corridor (TAC) leading to the Project, where fuel and hydrocarbon is transported by tanker truck to site;
- ▶ fuel and hydrocarbon storage areas;
- ▶ fueling stations;
- ▶ internal Minesite haul and service roads where tanker trucks will transfer fuel and hydrocarbon between fueling stations and equipment;
- ▶ internal Minesite haul and service roads used by equipment;
- ▶ diesel generators and light plants; and
- ▶ locations where fuel and hydrocarbon transfers occur using portable fuel and hydrocarbon containers or lubricant trucks.

Site fuel and hydrocarbon tanks will be built and installed to comply with regulatory requirements and BMPs, including the BC Fuel Guidelines, 9th Edition – 2020 (Northwest Response Ltd. 2020). External fuel and hydrocarbon storage vessels will be double-walled, and all internal storage vessels will include secondary containment if single walled and all transfer stations for heavy mine equipment will have designated fueling areas with protective gravel and geomembrane liners. Tanks will have high-level alarms and automatic shut-off systems to prevent tanks from being overfilled. Transfers from tanker trucks to tanks fueling and lubricant storage locations will be done using enclosed lines, hoses, and pumps. Storage and transfer locations will also be equipped with appropriate spill kits.

Fuel and hydrocarbon transfer procedures will include BMPs to ensure no overtopping of tanks or spillage. In addition, inventories will be tracked regularly to check on any possible losses. Spills and/or incidents involving fuel and hydrocarbons will be reported internally immediately, and if exceeding regulations, spills will be reported to Emergency Management British Columbia (EMBC), formerly known as Provincial Emergency Program (PEP), within 24 hours as per the **Spill Report Form** in **Appendix 13.7-B**. Employees

and contractors responsible for transporting or storing hydrocarbons or for fueling vehicles will receive training in proper operating procedures and emergency response.

6.3 Dangerous Goods and Hazardous Materials

Spills of other chemicals or hydrocarbon waste will be handled in accordance with this FMSCP and for additional information regarding the management of chemicals and hazardous materials onsite besides hydrocarbons, please refer to the **CMSTHP**.

6.4 Risk Analysis and Management

The analysis of risk and development of management techniques is a standard component of both mitigation planning and emergency planning. A risk-based assessment of potential incidents, their failure mechanisms, and their potential impacts will be used on an ongoing basis to identify potential high-risk areas and ensure procedures are in place to address these items.

Identification of potential failures is an integral component of preparing a management plan. Using the **Risk Assessment Matrix** information provided in **Appendix 13.7-C**, a risk assessment of selected spill risks is provided in **Table 6.4-1** below. The list provides selected materials of greatest concern.

Table 6.4-1: Analysis of Selected Spill Risks

Area of Concern	Cause of Spill	Potentially Affected Area	Preventive Measures	Available Response Resources	Likelihood	Consequence	Risk Assessment
Small Hydrocarbon Spills	Human error during handling; vehicle accident or maintenance of mobile equipment	Absorbed into soil; enter local creeks; human health	Storage containers with secondary containment; handling procedures, spill response and reporting	Spill kits strategically located around site and on vehicles; call for assistance; treatment of hydrocarbon affected soils at Soil Treatment Facility	Almost Certain	Insignificant	Moderate
Process Reagents	Rupture of container during transport; spill in Coal Processing Plant (CPP)	Absorbed into soil; enter local creeks; human health	Transport safety procedures; proper storage areas in CPP	Spill kits; call for assistance	Possible	Insignificant	Low
Large Hydrocarbon Spill	Rupture of container during transport or storage	Contaminate soil; enter local creeks; human and wildlife health	Use of newer equipment; transport safety procedures and double-walled storage tanks at fuel stations	Spill kits on transport trucks and at fuel stations; call for assistance; treatment of hydrocarbon affected soils at Soil Treatment Facility	Unlikely	Minor	Low
Methyl Isobutyl Carbinol (MIBC)	Spill during vehicle accident or spill in Maintenance Facility	Absorbed into soil; enter local creeks; human and wildlife health	Transport safety procedures; proper storage areas in Maintenance Facility	Spill kits; call for assistance	Unlikely	Minor	Low

6.5 Spill Emergency Response Plan

6.5.1 Classification of Spills

For the purposes of this FMSCP, a "major spill" is defined as an accidental release of a large or small quantity of material into the environment that has the potential for adverse impact and cannot be handled safely without the assistance of the Emergency Response Team (ERT), including events where a person is injured or contaminated. The ERT must be notified immediately of a major spill or emergency and will respond accordingly. See the **MERP** for further details about emergency response.

A "minor spill" is defined as any spill of material that does not involve highly toxic, highly reactive, or explosive chemicals, in a situation that is not life threatening to humans, fish or wildlife. Furthermore, this type of spill presents a manageable physical or health hazard to personnel who, when wearing proper Personal Protective Equipment (PPE), will not be exposed to any chemical at a level that exceeds any recognized action levels or permissible exposure limits.

Spills exceeding Spill Reporting Regulations, BC Reg 187/2017 (GovBC 2017) will be reported to EMBC (if exceeding volumes). Spills, regardless of size are to be reported to the Environmental Coordinator using designated forms (**Appendix 13.7-A** and **13.7-B**).

6.5.2 Hazardous Materials Onsite

A variety of hydrocarbon products and other hazardous materials are used as part of mining operations. Explosives are also stored onsite, and further details are available in the **Explosives Management Plan (S13.0-C6) (EMP)**. Material Safety Data Sheets (MSDS) of all materials transported, stored, and used onsite are available at strategic locations near to where hazardous materials or toxic substances are stored or utilized. As a reference onsite are up to date MSDS in the Health, Safety, and Human Resources Department, and a copy resides with the Environmental Coordinator, the Mine Superintendent, and the Plant Superintendent. A list of chemicals and materials that may be stored and/or used by the Project and are hazardous or potentially hazardous is provided in **Table 6.5-1** below. The list is approximate and will be subject to change during the Project phases.

Table 6.5-1: Hydrocarbons, Chemicals and Materials List at the Tenas Project

Material	Site Category	Location	Stored Amount
Diesel	Hydrocarbons	Pit Fueling Station	1 * 100,000 L
		Rail Infrastructure Fueling Station	1 * 20,000 L
Gasoline	Hydrocarbons	Light Vehicle Fueling Station	1 * 20,000 L
DEF	Hydrocarbons	Pit Fueling Station	4 * 5,000 L
		Rail Infrastructure	1 * 1,000 L
Lubricants and Used Oil	Hydrocarbons	Pit Fueling Station	5 * 3,000 L, 1 * 2,200 L
		Maintenance Lubricant Storage Facility	4 * 8,000 L, 4 * 3,000 L
		Rail Infrastructure Fueling Station	3 * 3,000 L, 1 * 2,200 L
Glycol and Used Glycol	Hydrocarbons	Pit Fueling Station	1 * 3,000 L; 1 * 2,200 L

Material	Site Category	Location	Stored Amount
		Maintenance Lubricant Storage Facility	1 * 8,000 L, 1 * 8,000 L
		Rail Infrastructure Fueling Station	1 * 1,000 L, 1 * 2,200 L
		Pit Fueling Station	1 * 1,000 L
Grease	Hydrocarbons	Maintenance Lubricant Storage Facility	1 * 1,000 L
		Rail Infrastructure	1 * 1,000 L
Diesel (Process Reagent)	Hydrocarbons	Process Reagent Storage Facility	1 * 20,000 L
Methyl Isobutyl Carbinol (MIBC) (Process Reagent)	Chemicals	Process Reagent Storage Facility	1 * 20,000 L
Ammonia Nitrate and Fuel Oil (ANFO)	Explosives	Explosive Facility	50,000 kg
Emulsion	Explosives	Explosive Facility	30,000 kg
Packaged Emulsion	Explosives	Explosive Magazine	14,000 kg
Acetylene	Gas	Maintenance Facility	2 * 30,000 L
Oxygen	Gas	Maintenance Facility	2 * 50,000 L
Paint	Chemicals	Maintenance Lubricant Storage Facility	1 * 100 L, 1 * 50 L
Solvents	Chemicals	Maintenance Lubricant Storage Facility	3 * 200 L
Flocculants (Magnafloc 10)	Chemicals	Maintenance Lubricant Storage Facility	1,000 kg
Flocculants (IPACFLOC 16)	Chemicals	Process Reagent Storage Facility	1,000 kg
Envirocrust 829C	Chemicals	Rail Infrastructure Fueling Station	24,000 L
Enviromelt SCR1	Chemicals	Rail Infrastructure Fueling Station	16,000 L

Notes: kg=kilogram; L=litre; m³=cubic metre

6.5.3 Preventions and Inspections

Spill response is reactive while spill prevention is proactive. Spill prevention, response, and reporting are part of the online induction, which is mandatory for Project workers. As well, employees and contractors are trained to call their Supervisor in the event of any spill at the Project. Reporting to EMBC is also required should the spilled volume exceed BC regulations. Spill kits are available to assist with retaining the spill or starting cleanup, if safe to do so. Upon arriving and inspecting the spill site, if potential hazards are present, personnel will call their supervisor to mobilize the ERT if required. To initiate an emergency call.

- ▶ Emergency is initiated by calling **5555** on desk-type phones, or by calling on two (2)-way radio on **“TCL Channel 4”: Emergency – Emergency – Emergency.**

Regular worksite inspections are conducted to identify measures to minimize or prevent the risk of spills. As part of online and/or in person induction sessions, employees and contractors are to understand the steps to be undertaken in the event of a spill. This includes that all spills are to be reported, and that containment and clean-up is necessary for minor and/ or major spills. Following the clean-up of a spill, the Environmental Coordinator will inspect the spill site and, if necessary, collect samples to verify that the clean-up is complete.

Personnel are trained to be aware of the potential hazards associated with the fuel and/or hydrocarbons and/or chemicals with which they will be assigned to work. In addition to worksite inspections conducted by area specific employees, the Environmental Coordinator or delegate also conducts bi-weekly inspections to audit facilities where hazardous materials are handled and stored.

TCL is implementing the following general principles for spill prevention:

- ▶ provide up-to-date and accessible MSDS for hazardous materials to designated emergency response personnel and Minesite health staff, and to the Smithers Hospital staff;
- ▶ regular inspection of fuel, hydrocarbon, and chemical storage areas for leaks along with inventory control (including tanks, secondary containment, flex connectors, and plumbing and platform or pad shifting;
- ▶ regular inspection of hazardous materials storage areas;
- ▶ train workers in the use of safe work procedures for hazardous materials, and procedures to clean up spills;
- ▶ encourage workers to take reasonable measures to prevent spills;
- ▶ keep drums and containers sealed or closed;
- ▶ place drums and containers within a suitable form of secondary or spill containment;
- ▶ segregate incompatible materials;
- ▶ ensure fuel and hydrocarbon storage areas are adequately protected from weather and physical damage; and
- ▶ provide adequate spill response materials at storage areas. Details of spill prevention and response equipment are outlined in **6.5.14 Response Equipment**.

6.5.4 Spill Response Organization

Site inductions are scheduled to ensure employees and contractors understand the steps to be undertaken in the event of a spill. Employees and contractors are shown where spill kits are stored, are made aware of their contents, and are familiarized with using spill equipment and responding to and reporting spills.

Regarding guidelines for spill kits, it is recommended that the Project have at a minimum the following list of spill equipment as noted in **Table 6.5-2**.

Table 6.5-2: Tenas Project Spill Kit Guidelines

Recommended Location of Spill Kits	Recommended Spill Kit Contents
▪ On all heavy mining equipment	▪ Round nose shovel or equivalent ▪ 5 -18-inch (") x18" absorbent pads or equivalent ▪ Heavy duty plastic garbage bag or equivalent

Recommended Location of Spill Kits	Recommended Spill Kit Contents
Pickup truck carrying auxiliary fuel greater than (>)100 litres (L)	- Round nose shovel 10 - 18"x18" absorbent pads or equivalent 2 - 3"x48" absorbent socks 1 - small container of bio-remediation agent (i.e., Oil Gator) 1 - small container of stop-leak putty or crystals (i.e., Plug N' Dyke) - Heavy duty plastic garbage bag or equivalent - Personal Protective Equipment (PPE) (not part of kit)
Pickup trucks	- Round nose shovel or equivalent 5 -18-inch (") x18" absorbent pads or equivalent - Heavy duty plastic garbage bag or equivalent
- Mobile tanks on trailers - Stationary designed tanks - Fuel trucks Note: for single container or combined volumes > 600 L	- This kit should accompany all fueling stations or be in proximity to the fueling stations - Round nose shovel 20 - 18"x18" absorbent pads or equivalent 6 - 3"x48" absorbent socks 1 - large container of bio-remediation agent (i.e., Oil Gator) 1 - large container of stop-leak putty or crystals (i.e., Plug N' Dyke) 1 - 20-foot (') x20' tarp (or equivalent size in square feet) 2 - Heavy duty plastic garbage bag or equivalent - Hatch Locks (fuel trucks only) - PPE (not part of kit)
- Permanent aboveground facility - Stationary dispensing stations maintained in one location for > one year duration Note: for single container or for containers with a combined volume > 8,000 L	2 - round nosed shovels 6 - 18"x18" absorbent pillows 6 - 3"x48" absorbent socks 30 - 18"x18" absorbent pads 2 - 20'x20' tarps 1 - large container of bio-remediation agent (i.e., Oil Gator) 1 - large container of stop-leak putty or crystals (i.e., Plug N' Dyke) 100' nylon rope - Container(s) sufficient to hold used absorbent material 10 empty sandbags 2 - 4"x5' polyvinyl chloride (PVC) pipe with connectors - PPE (not part of kit)

Figure 6.1-1 below illustrates TCL's spill/incident reporting procedures for minor and major spills, and the following subsections expand on emergency response actions, and lists the major responsibilities of Project's staff that will be participating in the emergency response.

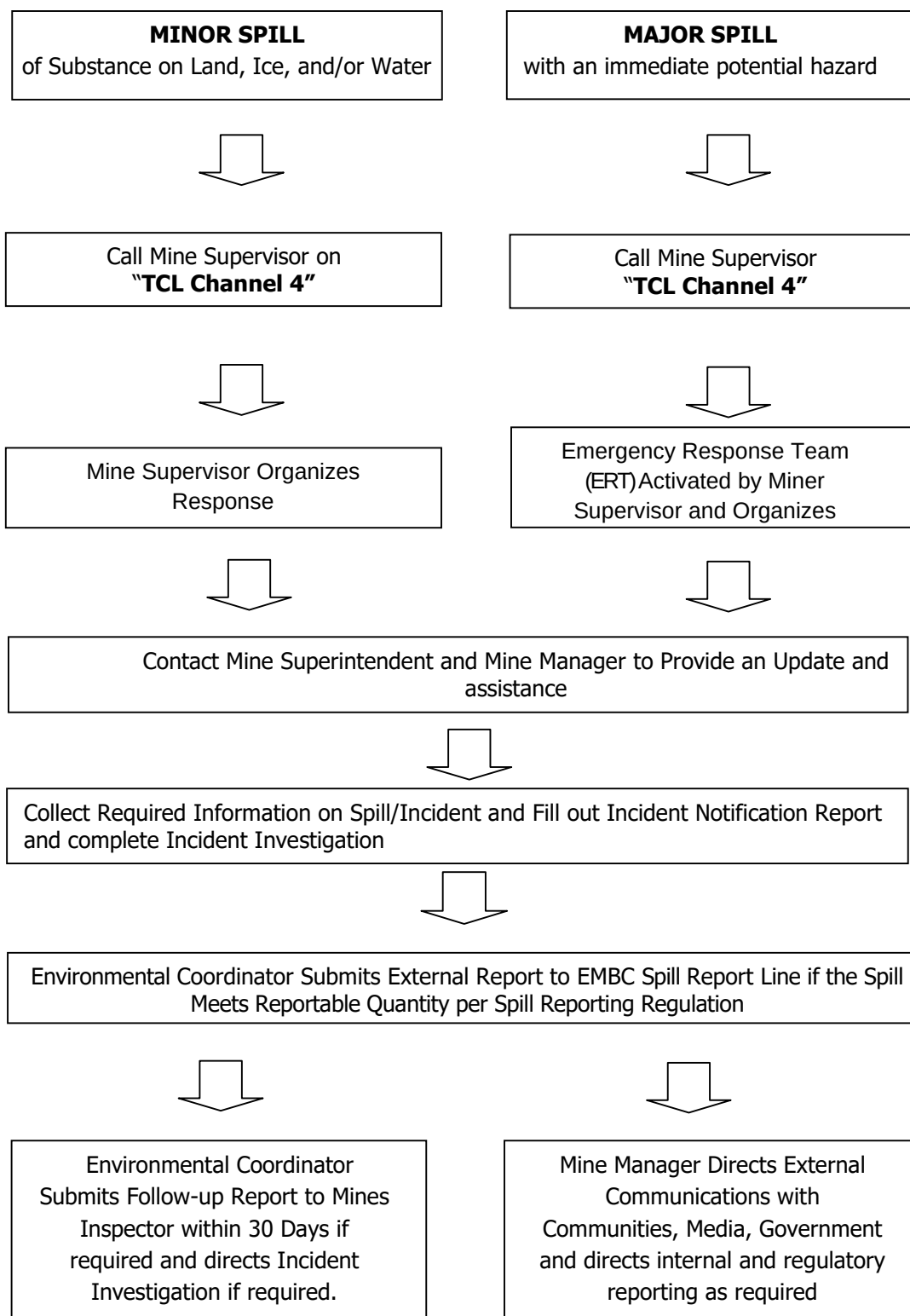


Figure 6.1-1: Spill/Incident reporting procedures

6.5.5 Action Plan

The primary form of ensuring safety is by using preventative measures. Personnel who must deal with fuel/hydrocarbons/chemicals have training in First Aid and safe materials handling, including Workplace Hazardous Materials Information System (WHMIS) and TDG. In addition, regular training updates and site-specific exercises and/or drills will be integral to preventing incidents.

Procedures will vary depending on the season and hazardous materials spilled, as well as on location of the spill (on land, water, ice, or snow). The MSDS will be consulted to ensure that safety procedures for specific products are followed. Response procedures specific to spills on land, water, snow, and ice are presented in the following sub-sections as general guidelines.

6.5.6 Initial Action

For spill emergencies, it is required that the following priority actions be undertaken:

- ▶ Ensure personal safety;
- ▶ Respond quickly; and
- ▶ Report the spill.

6.5.7 Respond Safely

Responding safely involves the following:

- ▶ Consult the MSDS and product guides for further information on the substance;
- ▶ Control the spill area to prevent unauthorized access by other workers;
- ▶ Ensure adequate ventilation;
- ▶ Assess whether the spill, leak, or system failure can be readily stopped or brought under control;
- ▶ Stop product flow or leak if possible and IF SAFE TO DO SO;
- ▶ Approach spill from upwind IF SAFE TO DO SO;
- ▶ Do not contain compounds (e.g., gasoline, aviation fuel) if vapors might ignite – allow them to evaporate;
- ▶ Depending on the type of compound spilled and IF SAFE TO DO SO, contain product using booms, berms, absorbent pads, earthen dykes, trenches or improvise with materials at hand; and,
- ▶ Wear appropriate PPE, such as impervious clothing, goggles, and gloves when containing the spill.

6.5.8 Respond Quickly

Responding quickly involves the following:

- ▶ Identify the spilled material;
- ▶ Stop the spill if safe to do so;
- ▶ Be alert – ensure safety of yourself and others by notifying them of the incident;
- ▶ Contact your supervisor for any spill (“**TCL Channel 4**”), identify the location and request assistance, as required. The Incident Commander will mobilize the ERT if necessary;

- ▶ Shut off ignition sources such as vehicles and unplug electrical equipment – NO SMOKING;
- ▶ Attend to the injured if applicable; and
- ▶ Assess the severity of the spill.

6.5.9 Reporting Spills

Reporting the spill includes the following:

- ▶ Obtain all necessary information to complete the **Spill Report Form (Appendix 13.7-B)** and forward it to the Environmental Coordinator via your Supervisor. Reportable spills must be reported by the Environmental Coordinator as soon as possible to the BC 24-Hour Spill Report Line (**1-800-663-3456**); and
- ▶ Complete **Incident Notification and Incident Investigation Reports** using the forms provided in **Appendix 13.7-A**.

6.5.10 Spills on Land

Response to spills on land includes the general procedures detailed in the following section. The main spill control techniques involve the use of two (2) types of barriers: berms and channels. Barriers should be placed down-gradient (down-slope) from the source of the spill, and as close as possible to the source of the spill. Barriers will slow the progression of the spilled material and will also serve as containment to allow recovery of the spilled material.

Depending on the spill volume, the site of the spill and available material, a berm may be constructed with soil, booms, lumber, snow, etc. A plastic liner should be placed at the foot of and over the berm to protect the underlying soil or other material and to facilitate recovery of the spill material.

Berm should be constructed to accumulate a thick layer of free product in a single area (V-shaped or U-shaped).

Channels are useful in the presence of permeable soil and when the spilled material is migrating below the ground surface. If deemed necessary, a material specific liner should be placed on the down-gradient edge of the trench to protect the underlying soil. Liners should not be placed on the bottom of the trench to allow water to continue flowing underneath the layer of floating material (such as fuel).

The use of large quantities of absorbent materials to recover significant volumes of spilled material should be avoided. Large volumes of free product should be recovered, as much as possible, by using vacuums and pumps, and containerized. Mixtures of water and fuel may be processed through an oil: water separator. Absorbent sheets should be used to soak up residual fuel on water, on the ground (soil and rock), and on vegetation. Peat moss may also be sprinkled on vegetation to absorb films of hydrocarbon products. Excavations will be planned for contaminated areas using heavy equipment and contaminated soil will be disposed at the Soil Treatment Facility, which will provide a location for treatment (bioremediation) of small volumes of hydrocarbon contaminated material. **Appendix 13.7-D** contains further information of the Soil Treatment Facility.

6.5.11 Spills on Water

Response to spills on water includes the general procedures provided in this subsection. Various containment, diversion and recovery techniques are discussed. The following elements must be taken into consideration when conducting response operations:

- ▶ type of waterbody or watercourse (lake, stream, river);
- ▶ type of spilled material;
- ▶ water depth and surface area;
- ▶ wind speed and direction;
- ▶ water flow and direction;
- ▶ type of shoreline;
- ▶ seasonal considerations (open-water, freeze-up, break-up, frozen); and
- ▶ equipment and personnel available for first response.

Containment of a hydrocarbon slick in water will require the deployment of mobile floating booms or maritime barrier (baffle) to intercept, control, contain and concentrate (i.e., increase thickness) the floating hydrocarbon.

Measures will be taken to protect sensitive and accessible shorelines. Should a spill occur in a waterbody of any volume, the BC Spill Reporting Regulation, BC Reg 187/2017 (GovBC 2017) requires reporting to the BC 24-Hour Spill Report Line (**1-800-663-3456**), along with monitoring of the water. The spill will be monitored to determine the direction of migration. In the absence of strong winds, the material will likely follow water flow direction. Measures will be taken to block and concentrate the spilled material at the discharge of a water body using booms, where it will subsequently be recovered.

In the case of spills in larger rivers, with fast moving currents, diversion booming will be used to direct the spilled material ashore for recovery. Single or multiple booms (i.e., cascading) may be used for diversion. Typically, the booms are anchored across the river at an angle. The angle depends on the current velocity. Choosing a section of a river that is both wider (i.e., less current) and shallower makes boom deployment easier. Diversion booming may also be used to direct the spilled material away from a sensitive area to be protected.

Contaminated water that can be contained and captured is to be sent offsite for disposal at an approved facility.

6.5.12 Spills on Snow and Ice

In general, snow and ice will slow the movement of hydrocarbons or other spilled material. Snow is generally a good natural sorbent. Hydrocarbons tend to be soaked up by snow through capillary action. However, the use of snow as a sorbent material will be limited as much as possible. Snow and frozen ground will also prevent spilled material from migrating down into soil or at least slow the migration process. Ice will prevent seepage of spilled material into the water. On the other hand, the presence of snow may hide the spilled material (especially hydrocarbon slicks) and make it more difficult to follow its progression.

Most response procedures for spills on land can be used for spills on snow and ice. The use of berm (i.e., compacted snow berms lined with plastic sheeting), or trenches (dug in ice) will slow the progression of the spilled material and will also serve as containment to allow recovery of the material. Free product will be recovered by using a vacuum, a pump, or sorbent materials. Contaminated snow and ice will be scraped up manually or using heavy equipment depending on volumes. The contaminated snow and ice will be placed at the Soil Treatment Facility and treated in spring.

6.5.13 Disposal of Spilled Material

Contaminated materials are salvaged, put into appropriate containers (e.g., approved bags or open head drums), and labelled for temporary storage. Water contaminated with oil or fuel is sent to the oil separator at the Maintenance Facility. Water contaminated with other products is placed in drums for shipment. Depending on the nature of the contamination, solid materials are either treated at the onsite Soil Treatment Facility, or eventually shipped offsite to an approved disposal facility.

Soils contaminated with light hydrocarbons (such as gasoline or diesel or lubricants) will be treated onsite by the Soil Treatment Facility provided in **Appendix 13.6-D**.

Soils contaminated with other spilled products are segregated, packaged, and shipped to an external approved facility for proper treatment and disposal. In this, TCL will adhere to the requirements for transport manifesting under the Hazardous Waste Regulation, BC Reg. 63/88 (GovBC 1988). Contaminated materials (dangerous goods) will be shipped in a means of containment required or permitted by regulations.

6.5.14 Spill Response Equipment

This subsection addresses the emergency response machinery, equipment, tools, and other resources that will be made available onsite for spill recovery measures. See the following **Tables 6.5-4, 6.5-5, 6.5-6 and 6.5-7**.

A mobile environmental emergency spill response trailer, which is easily accessible and transportable, is located onsite and contains the items listed in **Table 6.5-3** below.

Table 6.5-3: Contents of Mobile Environmental Spill Response Emergency Trailer

Emergency Response Equipment	
Pump centrifugal (summer only)	White oil spill pads and roll
Pump accessories, vacuum ends	Universal booms
Tubing or pipes for vacuum or pumping	Appropriate and approved bags
Tyvek™ suit and gloves	Wedge wood, plug patties
Diesel fuel jerry can (placed on a mini-berm)	Hand shovel
Leak control kit	Sledgehammer, re-bars
Drum opener	Pipe patch kit
Wescot (to open empty drum screw)	Absorbent pellet bag
Open head drums	Crowbar
Absorbent booms	Secondary containment
Tarps	Evacuation treatment system
Ropes	Yellow liner roll (bags)

If required, external resources available with the Smithers and Telkwa emergency response groups can be mobilized to assist with spills. Communication equipment onsite will include radios, telephones, and other wireless communication systems that will be available in the event of an emergency.

Spill response kits are strategically located where required onsite. Each department and work area are responsible for providing sufficient spill response kits in their respective work areas. The kits are kept in marked and accessible locations. The locations notably include all fuel storage areas and chemical storage areas.

All mobile equipment onsite (surface heavy equipment) is also equipped with an emergency spill kits and a quarterly audit is performed by the Environmental Coordinator.

The typical locations and contents of the above emergency spill kits is listed in **Table 6.5-4**.

Table 6.5-4: Spill Kit Equipment for Spill Emergency Response

Mobile Equipment – Spill Kits	
Excavators	Pickup trucks
Snowmobiles	Generator
All terrain vehicle (ATV)	Fire truck
Vacuum truck	Boats
Loaders	Fuel trucks
Backhoe	Haul truck
Bulldozer	Spill response trailer
Zoom boom	Bobcat
Water trucks	
Temporary Containment Systems	
Booms	Spill absorbent material
Drums, tanks	Packages/pads
Flexible bladder	Silt fencing
Temporary secondary containment	Maritime barrier
Emergency Transportation	
Helicopter if available	Snowmobile
ATV	Boats
Sno-Cat	Ambulance
Communication Equipment	
Radio	Email
Phone	Wireless communication system
Satellite phone	

Environmental emergency sea containers are located at the Rail Infrastructure Fueling station, Pit Fueling Station and at the two (2) quarries located along the TAC if they are operational. Each Environmental Emergency Sea Container contains approximately the materials listed in **Table 6.5-5** below.

Table 6.5-5: Environmental Emergency Sea Container Contents

Quantity	Equipment/Tool Name
3	Empty drum (sealed)
2	Mini berm 36 inches (") x 36"
2	4 drums spill capacity berm
4	Tarp 20 feet (') x 30'
4	Tarp 30'x 50'
10	Oil spill absorbent pad
5	Universal absorbent boom 5"x10' (for hydro-soluble chemical)
5	Universal absorbent boom 8"x10' (for hydro-soluble chemical)
5	Hydrocarbon base absorbent boom 5"x10' (for hydrocarbon product)
3	Maritime barrier (baffle)
2	Cell-U-Sorb (absorbent)
2	Amerisorb peat moss (absorbent)
2	Oil gator absorbent
1	Plug pattie
4	Quatrex bag and liners
2	Forklift wood pallet
4	Hand shovel
1	Crowbar chisel
1	Ice breaker chisel
1	Sledgehammer
15	Re-bar 4'
1	½ drum containment
1	Yellow liner roll
1	Toolbox
2	Silt fence
2	Silt bag
1	Spill kit 45 gallon
1	Yellow nylon rope roll

Table 6.5-6 below provides an approximate location of all spill kits and resources onsite.

Table 6.5-6: Spill Kit Locations

Area	Location
Emergency Response Building	Empty drums (sealed)
Pit Fueling Station	Mini berm 36-inch (") x 6"
Pit Fueling Station	4 drums spill capacity berm
Rail Infrastructure Fueling Station	Tarp 20'x30'
Pit Fueling Station	Tarp 30'x50'
Rail Infrastructure Fueling Station	Oil spill absorbent pads
Rail Infrastructure Fueling Station	Oil spill absorbent pads
Pit Fueling Station	Universal absorbent boom 5"x10' (for hydro-soluble chemical)
Pit Fueling Station	Universal absorbent boom 8"x10' (for hydro-soluble chemical)
Rail Infrastructure Fueling Station	Hydrocarbon base absorbent boom 5"x10' (for hydrocarbon product)
Mine Rescue Building	Maritime barrier (baffle)
Pit Fueling Station	Cell-U-Sorb (absorbent)
Rail Infrastructure Fueling Station	Empty drums (sealed)
Rail Infrastructure Fueling Station	Maritime barrier (baffle)
Maintenance Lubricant Storage Facility	- Oil spill absorbent pads - tarp 20'x30' - Cell-U-Sorb (absorbent) - Universal absorbent boom 5"x10' (for hydro-soluble chemical)
Chemical and Hazardous Waste Storage and Transfer Facility	- Oil spill absorbent pads - tarp 20'x30' - Cell-U-Sorb (absorbent) - Universal absorbent boom 5"x10' (for hydro-soluble chemical)

Please note heavy equipment, supervisor and management pickup trucks and transport buses also carry a temporary mobile spill kit. Furthermore, heavy, and light vehicles will be required to carry a spill kit that can quickly be deployed in the field to provide time for additional resources to be mobilized. This requirement applies to contractor vehicles that need to access the Project Area.

6.5.15 General Spill Response Procedures

Appendix 13.6-E Draft Spill Response Procedures for Select Substances provides TCL's current draft spill response procedures for current products that will be used by the Project. These procedures will be updated as products are added to site and the Project gets closer to the Construction Phase.

7. MONITORING

TCL will conduct regular inspections of storage and fueling facilities to ensure proper procedures are being followed and there is no potential for spills along with response supplies and equipment. An inspection schedule will be developed for each fuel storage site, considering the volume of fuel stored at each site and the respective risks related to that storage. Inspections will include tanks, pipelines, connections, valves, gauges and meters, sumps and separators, and inventory records. Inspections will be conducted by the Environmental Coordinator, recorded, and filed with the Mine Manager or their delegate.

7.1 Performance Objectives

The performance objectives and targets to ensure proper implementation of this FMSCP are shown in **Table 7.1-1**:

Table 7.1-1: Performance Objectives

Indicator	Target
Number of non-reportable hydrocarbon spills	Continual improvement
Number of reportable hydrocarbon spills	Zero
Number of major spills	Zero

8. REPORTING

8.1 General Reporting

Reporting completed by TCL will ensure consistent implementation of the FMSCP. Summary reports of monitoring activities and results will be compiled annually including the number of spills.

A **Spill Report Form (Appendix 13.7-B)** will be completed for all reportable and non-reportable spills that occur at the Project Minesite, regardless of quantity spilled or location. The report will be submitted to a Supervisor and the Environmental Coordinator for analysis including identification of repeat spill locations.

8.2 Compliance Reporting

Compliance reporting will be subject to EAC and MA/EMA permit conditions. The information gathered during monitoring practices will be summarized with information from other management plans into an Annual Environmental Management Summary Report and upon permitting completion, the Annual Environmental Reports as required by MA/EMA permits. Community engagement activities will be an aspect of the **Socio-economic Management Plan (S13.0-C16) (SEMP)**. The SEMP will have requirements related to reporting on community engagement programs.

In the event of a reportable spill as defined in **Table 8.2-1** below, a report will be also submitted to the EMBC (1-800-663-3456) as soon as possible after the spill event (no more than 24 hours) by the Environmental Coordinator.

It is an individual's legal obligation to ensure that a report for the spill is submitted by the company under the Spill Response Regulation, BC Reg 187/2017 (GovBC 2017). Failure to report a spill per the regulation could result in fines and criminal charges.

Table 8.2-1: Reportable Quantities Under the Spill Reporting Regulation, BC Reg 187/2017

Item	Column 1 -Substance Spilled	Column 2 - Specified Amount
1	Class 1, Explosives as defined in section 2.9 of the Federal Regulations	50 kg, or less if the substance poses a danger to public safety
2	Class 2.1, Flammable Gases, other than natural gas, as defined in section 2.14 (a) of the Federal Regulations	10 kg
3	Class 2.2, Non-Flammable, and Non-Toxic Gases as defined in section 2.14 (b) of the Federal Regulations	10 kg
4	Class 2.3, Toxic Gases as defined in section 2.14 (c) of the Federal Regulations	5 kg
5	Class 3, Flammable Liquids as defined in section 2.18 of the Federal Regulations.	100 L
6	Class 4, Flammable Solids as defined in section 2.20 of the Federal Regulations	25 kg
7	Class 5.1, Oxidizing Substances as defined in section 2.24 (a) of the Federal Regulations	50 kg or 50 L

Item	Column 1 -Substance Spilled	Column 2 - Specified Amount
8	Class 5.2, Organic Peroxides as defined in section 2.24 (b) of the Federal Regulations	1 kg or 1 L
9	Class 6.1, Toxic Substances as defined in section 2.27 (a) of the Federal Regulations	5 kg or 5 L
10	Class 6.2, Infectious Substances as defined in section 2.27 (b) of the Federal Regulations	1 kg or 1 L, or less if the waste poses a danger to public safety or the environment
11	Class 7, Radioactive Materials as defined in section 2.37 of the Federal Regulations	Any quantity that could pose a danger to public safety and an emission level greater than the emission level established in section 20 of the "Packaging and Transport of Nuclear Substances Regulations"
12	Class 8, Corrosives as defined in section 2.40 of the Federal Regulations	5 kg or 5 L
13	Class 9, Miscellaneous Products, Substances or Organisms as defined in section 2.43 of the Federal Regulations	25 kg or 25 L
14	Waste containing dioxin as defined in section 1 of the Hazardous Waste Regulation	1 kg or 1 L, or less if the waste poses a danger to public safety or the environment
15	Leachable toxic waste as defined in section 1 of the Hazardous Waste Regulation	25 kg or 25 L
16	Waste containing polycyclic aromatic hydrocarbons as defined in section 1 of the hazardous Waste Regulation	5 kg or 5 L
17	Waste asbestos as defined in section 1 of the Hazardous Waste Regulation	50 kg
18	Waste oil as defined in section 1 of the Hazardous Waste Regulation	100 L
19	Waste containing a pest control product as defined in section 1 of the Hazardous Waste Regulation	5 kg or 5 L
20	PCB Wastes as defined in section 1 of the Hazardous Waste Regulation	25 kg or 25 L
21	Waste containing tetrachloroethylene as defined in section 1 of the Hazardous Waste Regulation	50 kg or 50 L
22	Biomedical waste as defined in section 1 of the Hazardous Waste Regulation	1 kg or 1 L, or less if the waste poses a danger to public safety or the environment
23	A hazardous waste as defined in section 1 of the Hazardous Waste Regulation and not covered under items 1 – 22	25 kg or 25 L
24	A substance, not covered by items 1 to 23, that can cause pollution	200 kg or 200 L

Item	Column 1 -Substance Spilled	Column 2 - Specified Amount
25	Natural gas	10 kg, if there is a breakage in a pipeline or fitting operated above 100 psi that results in a sudden and uncontrolled release of natural gas

Source: *Spill Reporting Regulation BC Reg. 187/2017 (Government of British Columbia [GovBC] 2017) of the Environmental Management Act, SBC 2003, c 53 (GovBC 2003)*

Notes: kg=kilogram; L=litre, psi=pounds per square inch

8.3 Internal Reporting

Details of the monitoring programs will be reported internally on an annual basis according to the adaptive management framework of the EMS. The report will provide results of monitoring, assessment of performance objectives, and including but not necessarily limited to recommendations for infrastructure repair or movement.

The following information will be recorded on the **Spill Report Form (Appendix 13.7-B)**:

- ▶ the reporting person's name and telephone number;
- ▶ the name and telephone number of the company;
- ▶ the exact location and time of the spill;
- ▶ the type and quantity of the substance spilled;
- ▶ the cause and effect of the spill;
- ▶ details of action taken or proposed to comply with regulations;
- ▶ a description of the spill location and of the area surrounding the spill;
- ▶ the details of further action contemplated or required;
- ▶ the names of agencies on the scene; and
- ▶ the names of other persons or agencies advised concerning the spill.

A record of all spills, response activities and subsequent remediation and monitoring will be maintained by the Environmental Coordinator to support due diligence defense and to provide a basis for adaptive management of spill prevention and response planning. Documentation will include any site clean-up details with photos, written notes, and sample results if any were taken. A register of all spills will be kept for reporting and comparisons.

9. ROLES AND RESPONSIBILITIES

Fuel management and planning for an emergency spill involves preparing detailed procedures on how information and instructions will flow. Responsibilities for fuel management and spill control, especially during an emergency spill, will be divided among several pre-designated personnel as outlined below.

9.1 Mine Manager

The Mine Manager bears overall responsibility for the construction and operation of the Project, and responsibility for onsite environmental monitoring and compliance relating to Construction, Operation, Decommissioning and Reclamation and Post-closure phase activities. The Mine Manager reports to the executive steering committee for TCL and will coordinate with this group to ensure that Project objectives are being met.

The Mine Manager will:

- ▶ assume overall responsibility for overseeing fuel management and spill responses;
- ▶ assume or designate command as Incident Commander if an Emergency or Incident occurs;
- ▶ confirm resource personnel contacts;
- ▶ take charge of the deployment effort;
- ▶ confirm arrival and assignment of the ERT and other response personnel;
- ▶ confirm availability of personnel in the rotation schedules;
- ▶ develop a plan of action that includes assignment of ERT and other appropriate personnel; and
- ▶ as required, obtain outside assistance per the guidance of the **MERP**.

9.2 Mine Superintendent

The Mine Superintendent will:

- ▶ limit access to the affected area to authorized personnel only;
- ▶ obtain assistance from local law enforcement authorities as required;
- ▶ support the Mine Manager and Environmental Coordinator; and
- ▶ keep or delegate the collection of a log of Incident-related activities by time and event.

9.3 Environmental Coordinator

The Environmental Coordinator is responsible for the day-to-day management of Project environmental programs and permits. The Environmental Coordinator reports to the Mine Superintendent.

The Environmental Coordinator will:

- ▶ be the liaison for government agencies for permitting and non-compliance incidents;
- ▶ be the liaison for Indigenous groups, through their designated representatives, for permitting as well as spill response issues;

- ▶ ensure proper fuel handling methods are being followed by periodically auditing these areas;
- ▶ ensure appropriate response to a spill incident, considering substance properties and environmental receptors;
- ▶ report to the appropriate regulatory agencies as required;
- ▶ consult with the Mine Manager or delegate to determine if additional resources are required;
- ▶ complete paperwork (i.e., spill/incident reports);
- ▶ conduct and report on the inspection of fuel storage and handling locations;
- ▶ conduct Incident Investigations;
- ▶ oversee all media and community communications regarding Incidents or spills;
- ▶ shut down work at the spill location, if required;
- ▶ act as a resource to the personnel responding to the spill by providing guidance relating to permit conditions, commitments, regulations, and acts;
- ▶ perform a quarterly audit on emergency spill kits for all mobile equipment onsite, and
- ▶ review the FMSCP annually and update as required.

9.4 Health, Safety, and Human Resources Superintendent

In the management of procedures, training and response to incidents, the Health, Safety, and Human Resources Superintendent reports to the Mine Manager. The Health, Safety, and Human Resources Superintendent will:

- ▶ oversee the management of worker health and safety during an Incident;
- ▶ investigate health and safety complaints;
- ▶ be responsible for MSDS changes for new products or removal;
- ▶ be responsible for WHMIS training;
- ▶ ensure the removal of all persons affected by an Incident;
- ▶ confirm contact with all resource personnel;
- ▶ confirm security, emergency medical services, and transportation;
- ▶ remove personnel not directly involved in the emergency response;
- ▶ determine the extent to which the Supervisor in the affected area has been able to comply with instructions;
- ▶ establish and maintain communication between the senior onsite official and the affected area Supervisor;
- ▶ ensure that the evacuation procedure is activated when required, and that ERT and emergency equipment are quickly and continuously available;
- ▶ schedule successive response teams;
- ▶ depending on the size and scope of an Incident, act as MERP Coordinator; and
- ▶ keep or delegate the collection of a log of activities by time and event.

9.5 Emergency Response Personnel

Emergency Response Personnel will:

- ▶ ensure prompt administration of appropriate First Aid for any casualties from the spill;
- ▶ where applicable, notify a doctor about obtaining additional medical assistance or advice, supplies, or transportation as required and/or mobilize an ambulance; and
- ▶ prepare First Aid Room or prepare the Lunchroom, if multiple affected persons, to receive any casualties.

9.6 Employees and Contractors

A safety and environmental induction will be developed for TCL Minesite employees and contractors involved in the Project and will include the fuel management and spill control actions specific to the activity in which they are involved. A major component of this induction is a clear explanation of individual roles and responsibilities in the management of fuel around site and how to respond appropriately to a spill.

All employees and contractors will:

- ▶ comply with the FMSCP and related SPPs.

10. COMMUNICATION

Communication of the FMSCP at the Project will be based on the internal requirements and primarily through this FMSCP and SPP relevant to safety and materials management. Any significant change to a fuel, and or associated hydrocarbons onsite will be communicated to all Minesite employees and contractors through a site-wide email, announcements over all radio channels by Minesite supervision and bulletins posted around the Project.

10.1 Training and Awareness

Use of fuel on the Project Minesite requires special handling and training procedures. Employees, contractors, and subcontractors who are handling fuel (hydrocarbons) for the Project need to understand of this FMSCP and relevant SPP.

10.1.1 Training and Emergency Spill Exercise for Personnel

A designated ERT consisting of onsite personnel is established. TCL will ensure that the ERT is trained and present. Members of the team are trained and familiar with emergency and spill response resources, including their location and access, this FMSCP, and appropriate emergency spill response methods. The ERT will receive four (4) hours of training per quarter.

The training includes a review of:

- ▶ the FMSCP and responsibilities of the ERT members;
- ▶ the nature, status, and location of fuel and chemical storage facilities;
- ▶ the onsite and offsite spill response equipment and how to use it;
- ▶ how to use MSDS during an emergency;
- ▶ emergency contact lists;
- ▶ worker health and safety during emergency interventions;
- ▶ communication methods and signals;
- ▶ desktop exercises of “worst case” scenarios;
- ▶ emergency evacuation procedure;
- ▶ fires or explosions procedure;
- ▶ emergency equipment and use;
- ▶ use of PPE and clothing;
- ▶ shoreline recovery operations; and,
- ▶ likely causes and possible effects of spills.

Every employee and contractor at the Project receive basic spill and waste management training during their online induction, so that they can respond to small spills and raise the alarm if a larger response is required. The ERT members will receive additional spill response training and learn how to respond while wearing PPE.

The Environmental Coordinator will regularly attend tool-box sessions to provide information on spill response and reporting procedures, and provide similar information to the Health, Safety and Human Resources Department including the local hospital staff, as necessary. The information will include available up to date MSDS from the Health, Safety and Human Resources Superintendent, if needed.

10.1.2 Employee and Contractor Training

Employees are required to review relevant the FMSCP and related SPP and their associated training modules at the start of employment and on annual basis. Employee training is tracked and managed.

Contractors will review the relevant SPP at the start of their contract and on an annual basis if contracts are longer than thirteen (13) months in duration to ensure their compliance with these requirements. Visitors will receive an overview of the relevant SPP during their visitor induction session prior to accessing the Minesite or from their Contract Manager. Visitors are generally restricted to being under the direction of TCL employees for use of TCL roads and will be escorted by TCL personnel onsite or accompanying TCL personnel in their vehicles.

10.1.3 Visitor Training

Visitors will not be required to be knowledgeable of this FMSCP as they will be under the direction of TCL employees and will not be allowed to be a situation involving fuel management and spill control.

11. EVALUATION AND ADAPTIVE MANAGEMENT

11.1 Evaluation

A review of the FMSCP will be completed by the Environmental Coordinator on an annual basis to compare data, trends, and implementation of the management plans and their objectives. This process will include a review of the management plan deliverables and input received from Indigenous groups through community engagement programs.

11.2 Adaptive Management

A philosophy of adaptive management will be adopted to make sure that management plans and mitigation measures are consistently meeting or exceeding performance targets. This will be achieved through periodic reviews of the FMSCP and the results of monitoring programs.

11.3 Continual Improvement

TCL will amend the FMSCP as required based on annual evaluations and feedback from stakeholders and Indigenous groups. TCL will work towards continual improvement at the Project. The Mine Manager or their delegate will investigate improvements in any trend and assess whether the practices responsible for the improvements can be applied to other areas of the Project. Deteriorating trends will be studied to determine the root cause. When the cause is identified, the Mine Manager or their delegate will implement a suitable corrective action. Examples of corrective actions could include:

- ▶ finding alternate forms of materials to reduce waste or increase reusability;
- ▶ additional training of employees and contractors on procedures;
- ▶ enhancement of maintenance or monitoring measures; and/or
- ▶ additional supervisory oversight.

TCL will review the FMSCP annually and amend it as required based on annual evaluations and feedback from relevant stakeholders and Indigenous groups.

12. CHANGE MANAGEMENT

Changing any part of this management plan requires a formalized process to be used. If significant changes to objectives, management plan structure, operational milestones, communication and/or information management are being planned, it is required that the Management of Change (MOC) procedure in TCL's **EMS** be followed. All minor edits and/or updates to this FMSCP will be controlled through version control and content approval functions.

13. CONCLUSION

Management of fuel and spills of hydrocarbons, chemicals, or other hazardous materials at the Project is important for the safety of all personnel, and for the environment. Furthermore, there are various regulatory obligations related to fuels and spill response. Through implementation of this FMSCP and relevant SPP, TCL will ensure the safety of fuel management and spill control activities at the Project.

14. REFERENCES

- British Columbia Ministry of Energy, Mines and Low Carbon Innovation (BC MEMLI). 2021. Health, Safety and Reclamation Code for Mines in British Columbia. Available at: <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/health-safety/health-safety-and-reclamation-code-for-mines-in-british-columbia>. Accessed July 2021.
- British Columbia Ministry of Energy, Mines and Petroleum Resources (BC MEMPR) and British Columbia Ministry of Environment and Climate Change Strategy (BC MECCS). 2019. Joint Application Information Requirements for *Mines Act* and *Environmental Management Act* Permits. Available at: https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/mineral-exploration-mining/documents/mineral-titles/permitting/2019_09_24_joint_application_information_requirements.pdf. Accessed July 2021.
- British Columbia Ministry of Environment and Climate Change Strategy (BC MECCS). 2021. Spill Reporting. Facts On The Management Of Environmental Emergencies, March 2021. Available at: https://www2.gov.bc.ca/assets/gov/environment/air-land-water/spills-and-environmental-emergencies/docs/materials/fact_sheet_spill_reporting.pdf. Accessed July 2021.
- British Columbia Ministry of Water, Land and Air Protection (BC MWLAP). 2002. A Field Guide to Fuel Handling, Transportation & Storage 3rd Edition, February 2002. Available at: <https://www2.gov.bc.ca/gov/content/environment/waste-management/industrial-waste/fuel-tanks>. Accessed July 2021.
- Canadian Council of Ministers of the Environment (CCME). 2003. Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products. Winnipeg, Manitoba. www.ccme.ca. Available at: <https://www.canada.ca/content/dam/eccc/documents/pdf/cepa/ccme-pn-1326-eng.pdf>. Accessed July 2021.
- Government of British Columbia (GovBC). 1988. Hazardous Waste Regulation, BC Reg. 63/88. Available at: <https://canlii.ca/t/532kb>. Accessed July 2021.
- Government of British Columbia (GovBC). 1994. Petroleum Storage and Distribution Facilities Storm Water Regulation, BC Reg 168/94, Available at: <https://canlii.ca/t/jjtx>. Accessed July 2021.
- Government of British Columbia (GovBC). 1996. Contaminated Sites Regulation, BC Reg 375/96. Available at: <https://canlii.ca/t/54x1t>. Accessed July 2021.
- Government of British Columbia (GovBC). 2003. *Environmental Management Act*, SBC 2003, c 53. Available at: <https://canlii.ca/t/54wmd>. Accessed July 2021.
- Government of British Columbia (GovBC). 2017. Spill Preparedness, Response and Recovery Regulation, BC Reg 185/2017. Available at: <https://canlii.ca/t/531r5>. Accessed July 2021.
- Government of British Columbia (GovBC). 2017. Spill Reporting Regulation, BC Reg 187/2017. Available at: <https://canlii.ca/t/jk4x>. Accessed July 2021.
- Government of British Columbia (GovBC). 2018a. BC Building Code 2018. Available at: <https://free.bcpublications.ca/civix/content/public/bcbc2018/?xsl=/templates/browse.xsl&xsl=/templates/browse.xsl>. Accessed July 2021.
- Government of British Columbia (GovBC). 2018b. BC Fire Code 2018. Available at: <https://free.bcpublications.ca/civix/content/public/bcfc2018/?xsl=/templates/browse.xsl&xsl=/templates/browse.xsl>. Accessed July 2021.

- Government of Canada (GovCan). 1985. *Fisheries Act*, 1985, c F-14. Available at: <https://canlii.ca/t/543j4>. Accessed July 2021.
- Government of Canada (GovCan). 1992. *Transportation of Dangerous Goods Act*, SC 1992, c 34. Available at: <https://canlii.ca/t/543hb>. Accessed July 2021.
- Government of Canada (GovCan). 1999. *Canadian Environmental Protection Act*, SC 1999, c 33. Available at: <https://canlii.ca/t/54tsw>. Accessed July 2021.
- Government of Canada (GovCan). 2001. *Transportation of Dangerous Goods Regulations*, SOR/2001-286. Available at: <https://canlii.ca/t/554cg>. Accessed July 2021.
- Government of Canada (GovCan). 2002. *Species at Risk Act*, SC 2002, c 29. Available at: <https://canlii.ca/t/552zg>. Accessed July 2021.
- Government of Canada (GovCan). 2008. *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations*, SOR/2008-197. Available at: <https://canlii.ca/t/54v07>. Accessed July 2021.
- Government of Canada (GovCan). 2019. *Environmental Emergency Regulations*, SOR/2019-51. Available at: <https://canlii.ca/t/lf2g>. Accessed July 2021.
- Northwest Response Ltd. 2020. *BC Fuel Guidelines*, 9th Edition, March 2020. Available at: <https://www.fuelmanagement.ca/bc-fuel-guidelines>. Accessed July 2021.