

# **SPILL CONTINGENCY PLAN**

**Underground and Surface Miner Training Program**

**GNWT – DOT Quarry, KM232 Highway 5**

**Salt Mountain near Fort Smith, NT**



*Effective March 2017*

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## INTRODUCTION

This Spill Contingency Plan (“SCP”) has been developed in order to formalize the actions taken in the event of a spill of hydrocarbon product or hazardous material. The responsibilities of key personnel are defined, along with procedures for spill response that will minimize hazards to health and safety, damage to the environment and clean-up costs. This SCP has been prepared in order to provide easy access to the required information needed for spill response.

Vehicles used include two pieces of heavy underground equipment and a flat deck manual transmission truck. Small powered equipment such as gas powered generators, electric transfer pumps and power tools may be used. Fuel types used for these items include both diesel and gasoline. Other materials used will include lubricants and hydraulic fluids. A portable toilet will be located beside the shed which uses a chemical toilet deodorizer which reduces odor and performs partial disinfection of the waste. It will be pumped and cleaned regularly by an outside contractor.

Lubricants and hydraulic fluid are stored in sealed containers. All fuels and hazardous materials are handled manually and are checked daily for indications of leakage or spills.

Leaks or spills will most likely happen as a result of poor maintenance, improper fuel transfer, mishandling of containers or blown hydraulic hoses.

## FUELS/HAZARDOUS MATERIALS ON SITE

<u>FUEL/HAZARDOUS MATERIAL</u>	<u>AMOUNT</u>	<u>STORAGE LOCATION</u>
Diesel	500 litres	Tidy tank on back of pick up
Grease	1 case of grease tubes	Inside shed
Oil	20 litres	Inside shed
Hydraulic fluid	20 litres	Inside shed
Windshield washer fluid	1 case	Inside shed
Toilet Deodorizer	1 ounce/3 gallon water	Inside toilet reservoir

## **PERSONNEL AND RESPONSIBILITIES**

1. Students/Instructors – report any spills or leaks related to equipment operations directly to the Field Supervisor
2. Students – check and document fuel storage containers for leaks or damage on a daily basis. Make sure that spill response kits are properly supplied and up to date. Report any spills or leaks directly to the Field Supervisor. Clean up minor spills immediately if safe to do so.
3. Field Supervisor – when spills or leaks are detected, ensure the safety of personnel and the environment. Assess the situation. Communicate to other personnel (as necessary), call in emergency personnel (if required) and report spill to relevant authorities and College management (if required).
4. Any contaminated soils, snow or ice with hazardous or hydrocarbon material, once cleaned up will be disposed of at the approved area(s) at the Yellowknife Land Fill site or at KBL Environmental Ltd. in Yellowknife. Contaminated materials will be stored in approved disposal bags or metal containers for transport to approved disposal locations.

## **CONTACT TELEPHONE NUMBERS**

NWT 24 hr Spill Line	Ph: (867) 920-8130
Aurora College – Program Coordinator	Ph: (867) 872-7570
Aurora College – Head Office	Ph: (867) 872-7000
Environmental Protection Services (Yellowknife)	Ph: (867) 873-7654
Mackenzie Valley Land and Water Board	Ph: (867) 669-0506
AANDC Land Use Permit Inspector	Ph: (867) 669-2794
RCMP Yellowknife	Ph: (867) 669-1111
Stanton Territorial Hospital (Yellowknife)	Ph: (867) 669-4111
GNWT – DOT (MV2010X0006 permit holder)	Ph: (867) 920-8060



## **ACTION PLAN**

### **1. Likeliest location for leaks and spills**

- i. Fuel storage area – spills and leaks from jerry can or containers
- ii. Equipment refueling station – during fuel transfer from Tidy Tank into vehicles or from jerry can into generator
- iii. Equipment using fuel – leaks and spills directly from equipment
- iv. Equipment maintenance area – leaks and spills during routine maintenance
- vi. Only minimal amounts of unopened grease and oil containers will be stored on site in a locked building.
- vii. No diesel fuel will be stored on site and refuelling will be done from a "Tidy tank" mounted on a 1/2 ton truck which is not left on site. Refuelling will be done at a designated area which is more than 30 meters from any high water mark. A spill response kit is on site.

### **2. Potential environmental impacts of a spill**

#### *i. Gasoline*

Gasoline may be harmful to wildlife and aquatic life. It is not readily biodegradable and has the potential for bioaccumulation in the environment if not properly cleaned up. Gasoline is quick to volatilize. Runoff into water must be avoided.

#### *ii. Diesel Fuel*

Diesel may be harmful to wildlife and aquatic life. It is not readily biodegradable and has the potential for bioaccumulation in the environment. Diesel burns slowly and thus risk to the environment is reduced during recovery as burn can be more readily contained compared with volatile fuels. Runoff into water must be avoided.

### 3. Procedures

#### a) Initial Actions

- i. Ensure personal safety and that of others who are on the scene prior to the arrival of the Field Supervisor.
- ii. Assess the hazard to persons in the vicinity of the spill.
- iii. If possible, without further assistance, control any danger to human health.
- iv. Assess whether the spill can be readily stopped or brought under control.
- v. Where safe to do so, stop the flow of the spilled product.
- vi. Report the spill without delay to the Field Supervisor.
- vii. Resume any action to contain, clean up, or stop the flow of spilled product until the Field Supervisor takes control of the scene.

#### b) Reporting

Report spill immediately to Field Supervisor who will determine if spill is to be reported to the NWT Spill Report Line (867) 920-8130. The Field Supervisor, if uncertain about reporting limits, should refer to *Table 1: Immediately Reportable Spill Quantities*. All spills, regardless of size, must be documented internally and records kept for the duration of the permit.

Aurora College has implemented the following to minimize the probability of spill occurrence during fuel handling, transfer, or storage operations.

- Immediately cleanup minor spills
- Conduct regular inspections of fuel storage area and equipment for evidence of leaks.
- Use drip pans and/or absorbent pads at all petroleum transfer sites and underneath stationary machinery, particularly when performing routine maintenance
- Train personnel in proper fuel handling and spill response procedures

### SPILL KIT INVENTORY

The following items make up the spill kit that is to be located in the shed on site:

- 50 sorbent pads
- 5 sorbent socks (3 x 48")
- 20 lb bag of granular absorbent
- 5 disposal bags
- 1 shovel
- 2 pairs of safety goggles
- 2 pairs of nitrile gloves

The spill kit will be inventoried at the end of each week and must be replenished immediately following a spill incident.

## **TRAINING**

All personnel on the training site are familiarized with procedures in this document upon arrival at site. The Program Coordinator is responsible for ensuring that the SCP is updated as required. The Field Supervisor will be responsible for ensuring the physical cleanup of spills and leaks is carried out properly and efficiently.



**Table 1: Immediately Reportable Spill Quantities**

TDG Class	Substance	Immediately Reportable Quantities for NWT 24 Hour Spill Line
1 2.3 2.4 6.2 7 None	Explosives Compressed gas (toxic) Compressed gas (corrosive) Infectious substances Radioactive Unknown substance	Any amount
2.1 2.2	Compressed gas (flammable) Compressed gas (non-corrosive, non flammable)	Any amount of gas from containers with a capacity greater than 100 L
3.1 3.2 3.3	Flammable liquids	≥ 100 L
4.1 4.2 4.3	Flammable solids Spontaneously combustible solids Water reactant	≥ 25 kg
5.1 9.1	Oxidizing substances Miscellaneous products or substances excluding PCB mixtures	≥ 50 L or 50 kg
5.2 9.2	Organic Peroxides Environmentally hazardous	≥ 1 L or 1 kg
6.1 8 9.3	Poisonous substances Corrosive substances Dangerous wastes	≥ 5 L or 5 kg
9.1	PCB mixtures of 5 or more ppm	≥ 0.5 L or 0.5 kg
None	Other contaminants (e.g. crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids, waste water, etc.)	≥ 100 L or 100 kg
None	Sour natural gas (i.e. contains H <sub>2</sub> S) Sweet natural gas	Uncontrolled release or sustained flow of 10 minutes or more

*Note: Taken from AANDC Guidelines for Spill Contingency Planning*

## **REVIEW AND UPDATE**

The SCP will be subject to annual review and update to ensure compliance with regulations, permits and relevant legislation. The SCP will also be reviewed prior to undertaking each training session annually.

# APPENDIX I – NT/NU SPILL REPORT

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INSERT SPILL REPORT

## APPENDIX II – MATERIAL SAFETY DATA SHEETS

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## *Gasoline, Unleaded*

**Insert Gasoline MSDS**

The heading is here so it is noted in the Table of Contents....simply replace this and next few pages with MSDS sheets.

















## *Diesel Fuel*

The heading is here so it is noted in the Table of Contents....simply replace this and next few pages with MSDS sheets.















## *Windshield Washer Fluid*

The heading is here so it is noted in the Table of Contents....simply replace this and next few pages with MSDS sheets.















## *Hydraulic Fluid*

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## *Grease*

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## *Engine Oil*

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## *Toilet Deodorizer*

The heading is here so it is noted in the Table of Contents....simply replace this and next few pages with MSDS sheets.