



CONSTRUCTION LEADERS

APPENDIX A - SPILL CONTINGENCY PLAN

PURPOSE AND SCOPE:

The purpose of this Spill Contingency Plan is to clearly identify potential spill risks associated with the construction of the **Cargill Electrical Distribution Upgrade Project**, and to identify the procedures to be followed to facilitate the rapid deployment of resources to minimize impacts and risks to the environment.

It is understood and expected that subcontractors will have in place relevant inspection and maintenance regimes for any equipment that will be used on-site. This will be the first level of preventive measures to reduce the risk of spills of substances such as hydrocarbon fuels or lubricants. It is a contractual requirement of all subcontractors is thoroughly familiar with this plan.

IDENTIFICATION OF HAZARDOUS MATERIALS:

The following substances will be utilized during project construction:

- Lubricating Oils;
- Diesel;
- Gasoline;
- Propane.
- Oxy/Acetylene;
- Form release agents;
- Other products as indicated in the specification documents.

Additional substances identified subsequent to the distribution of this plan will be addressed as quantities and suppliers are finalized. Material Safety Data Sheets (MSDS) for all substances used will be maintained on site in a predetermined location familiar to all employees. These sheets identify:

- product information;
- hazardous ingredients;
- physical data;
- fire and explosion hazard;
- reactivity data;
- toxicological properties;
- preventative measures;
- first aid measures; and,
- preparation information, as required by the Workers' Compensation Board of British Columbia.

ASSOCIATED RISKS:

Risks associated with the occurrence of spills include:

- environmental pollution/degradation;
- human exposure, via dermal contact or inhalation possibly resulting in illness;
- slipping, possibly resulting in personal injury; and/or,
- fire.

In order to minimize the occurrence/consequences of spills it is important to ensure that:

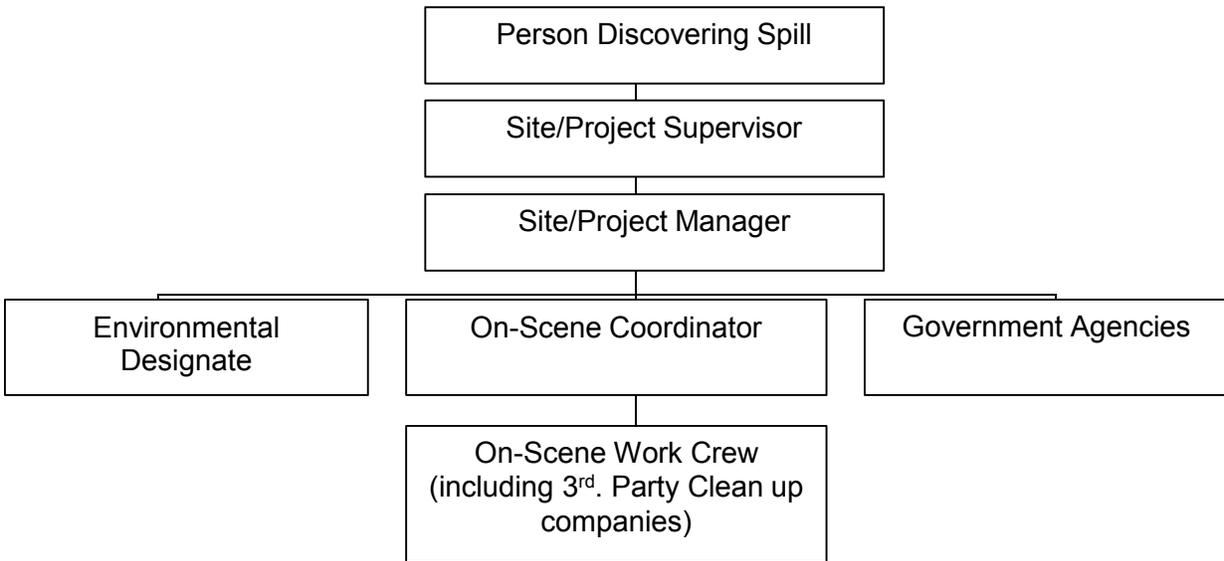
- Equipment is properly maintained, ensuring all leaks are repaired;
- All onsite fuel is properly stored within double-walled tanks or within approved secondary containment facilities;
- Fuel and/or lubricant containers are stored with the lids on in order to prevent overflow during heavy rainfall, or spills if accidentally knocked over;
- Spill kits are available in visible, accessible locations; and,
- Prompt and effective clean-up is initiated in the event of a spill.

Workers will be encouraged to provide information on weaknesses in current management control and prevention systems such that improvements can be made which may eliminate the occurrence of a spill.

EMERGENCY ORGANIZATION AND RESPONSIBILITIES:

Spills of chemical, fuels and other substances may occur as isolated events or they may occur in association with other emergencies such as fire, explosion, natural causes or accident.

The key personnel involved during a spill incident and the reporting responsibilities are illustrated in the following chart.



The responsibilities of each of these personnel are discussed on the following pages, with names and numbers kept current at all times at the project site.

RESPONSIBILITIES OF THE PERSON DISCOVERING THE SPILL, FIRE OR INJURY:

Any person discovering a spill will:

- Assess the initial severity of the spill and safety concerns. If a risk of gas poisoning exists or if fire or explosion hazards are perceived, then warn all personnel to evacuate the area.
- Identify the source of the spill.
- Arrange for appropriate operating equipment to be shut down, if applicable, contain the spill and remove any sources of ignition.
- Notify his/her Supervisor immediately.
- If warranted, notify on-site Occupational First Aid persons to administer first aid.

Any person attending a person exposed to spilled substances will:

- Notify on- Occupational First Aid persons to administer first aid.
- Notify his/her Supervisor immediately.
- Notify ambulance or police if required.

RESPONSIBILITIES OF THE SITE/PROJECT SUPERVISOR:

The Supervisor must immediately contact the Site/Project Manager with the following information:

- The name of the person discovering the spill;
- The time of the incident;
- The location of the incident;
- The type and quantity of the substances spilled;
- The cause of the incident, if known;
- The current weather conditions;
- Any perceived potential for hazard, and any injury to people, wildlife or the marine environment;
- Whether a fire or explosion hazard is deemed to exist;
- Any actions already taken; and,
- Any persons already notified.
- The Supervisor will remain on-site, with the exception of imminent personal danger.

RESPONSIBILITIES OF THE SITE/PROJECT MANAGER:

In the case of a spill, the Site/Project Manager will immediately inform the following:

- The Environmental Designate
- 3rd Party Spill Clean Up Company depending on the nature of spill (extent and substance spilled)
- The Provincial Emergency Program (PEP) at **1-800-663-3456**. This 24-hour government contact will notify all concerned municipal, provincial and federal agencies, including the following, as appropriate:
 - The local PEP office;
 - The police;
 - The Provincial Waste Management Branch;
 - The Provincial Ministry of Health;
 - Environment Canada, and
 - Any other relevant agencies.
- If applicable, the Ministry of Water, Land and Air Protection Emergency Oil Spill Plan at **1-800-663-3456**.

The Site/Project Manager will plan for the disposal of recovered spill material and, upon completion of the cleanup and restoration, prepare a Spill Report.

A complete log of events and activities undertaken during and after the spill, and photographs if possible for legal purposes and critical review of events at a later date.

RESPONSIBILITIES OF THE ENVIRONMENTAL DESIGNATE:

The Environmental Designate will maintain contact with, advise and coordinate work crews undertaking the actual cleanup of a spill. After successful cleanup is completed, the Environmental Designate will:

- Ensure this Spill Contingency Plan is up-to-date with all potentially hazardous materials listed and all names of personnel and phone numbers accurate;
- Be responsible for assessing new spill hazards as they develop and take preventative actions, whether covered in this Plan or not;
- Check and maintain the operating status of required response equipment which may be required at a spill (i.e. a spill kit containing: absorbent material such as Dry Rite, absorbent pads, booms); and,
- Train emergency response personnel with respect to their duties.

RESPONSIBILITIES OF THE ON-SCENE COORDINATOR AND WORKCREW:

Upon receiving a report of a spill, the On-Scene Coordinator and Work Crew will carry out the following:

- If injury, serious health threats or potential equipment hazards exist, call the Site/Project Manager if the person reporting the spill has not already done so.
- Consult the appropriate MSDS to review the properties of the spilled material and recommended response actions. If further information is required, contact one of the resource services listed below.
- Assess the spill requirements for human resources, equipment, materials, tools and protective gear to contain the spill, in consideration of the resources available. Mobilize these resources and take responsibility for implementation of the response actions at the spill site.
- Contact the Environmental Designate to determine what, if any, sampling should be done and to discuss the spill and any environmental implications.
- Due to the proximity of the project site to fish bearing waters it is critical that all attempts be undertaken to prevent the introduction of spilled material into the marine environment. This can be achieved through the use of spill kit equipment including absorbent pads, booms, or in the case of a high volume spill, as may occur in a vehicular accident, a temporary berm made of local substrate material to impede flow and contain the spill.

ANNUAL SPILL RESPONSE EXERCISE:

A spill response exercise will be conducted at least once per year to test and evaluate the state-of-preparedness of the Spill Response Team and the communications links with PEP and the provincial, federal and municipal agencies that could become involved with responding to actual spill incidents.

Spill response exercises can take the form of desk-top exercises intended to evaluate the decision-making procedures required in the event of an actual spill incident. In particular, this type of exercise exposes the members of the Spill Response Team to their responsibilities in the event of a spill and provides the opportunity to evaluate communications among the team and with the regulatory and resource agency reporting system.

Field spill response exercises serve to test the effectiveness of the Spill Response Team and its equipment. Such exercises involve the actual deployment of spill response equipment and manpower under realistic yet hypothetical conditions. Exercises of this nature permit evaluation of the response techniques and provide valuable practice experience for the participants in the exercise.

RESOURCES AND PHONE NUMBERS:

Response to accidents involving the transportation of dangerous goods is the responsibility of the shipper. Site personnel will lend whatever assistance is required in order to rapidly contain and clean up spill incidents.

Response to spills involving products received from the supplier is the sites responsibility. It is anticipated that the procedures outlined above will be sufficient in most instances to deal with problems that may arise. However, in some cases there may be a need to obtain further assistance. The following list summarizes personnel and/or resources to be contacted in case of a spill, fire or injury incident, as well as additional resources that may be able to provide information or assistance.

EMERGENCY CONTACTS:

Fire, Police, Ambulance	911
Poison Control Centre	604-682-5050 or 1-800-567-8911
Project site number	TBD
Site/Project Manager – Chad McPhee	604-803-9438
Site/Project Superintendent – Paul Fenton	604-928-3365
Project Coordinator – Carly Watson	604-802-5903
Environmental Designate – Colin Rink	604-809-1353
Provincial Emergency Program (PEP) 24-hour	1-800-663-3456
Water, Land and Air Protection	604-582-5222
Environmental Canada	604-666-0370
Spill Response Advice:	
CANUTEC, Chemical Accident Emergency Advisory Service, Transport Canada	613-996-6666

Spill Reporting Requirements

Item	Column 1 Substance spilled	Column 2 Specified amount
1	Class 1, Explosives as defined in section 2.9 of the Federal	Any quantity that could pose a danger to public safety or 50 kg
2	Class 2.1, Flammable Gases, other than natural gas, as defined in section	10 kg
3	Class 2.2 Non-Flammable and Non-Toxic Gases as defined in section 2.14	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	25 kg
7	Class 5.1, Oxidizing Substances as defined in section 2.24 (a) of the Federal	50 kg or 50 L
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	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	5 kg or 5 L
13	Class 9, Miscellaneous Products, Substances or Organisms as defined in section 2.43 of the	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

Item	Column 1 Substance spilled	Column 2 Specified amount
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	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
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