

## *Emergency Response Plan - Priority Action Steps*

### **PREVENTION**

#### **Risk Assessment**

- Define High Risk Aspects

#### **Legal Issues**

- Due Diligence
- Transportation Requirements
- Reporting Requirements

#### **Awareness Training**

- Standard Operating Procedures
- BC Fuel Guidelines

### **PREPAREDNESS**

#### **Spill Response Plan & Safety Plan**

- Action Priorities/ Notification List/ Response

#### **Spill Equipment**

- Sorbents
- Booms (Containment vs. Sorbents)
- Patching and Plugging
- Spag Sorb & Oil Gator

#### **Spill Response Training**

- Containment Techniques
- Review Spill Kits
- Review ERP

#### **Chemical Characteristics of Class 3 Products**

- MSDS Review
- 3-Day Rule-of-Thumb
- Soap & deleterious substances
- Flash point

### **RESPONSE**

#### **Initial Assessment**

- Spill Assessments
- Environmental Assessment
- Safety Assessment

#### **Initial Response**

- Containment
- Site Security
- Decontamination
- Media & Government Agencies

#### **Land-based Spills**

- Small Spills (<100L)
  - Optional Response
- Large Spills (>100L)
  - Recovery Pits & Trenching
  - Excavation

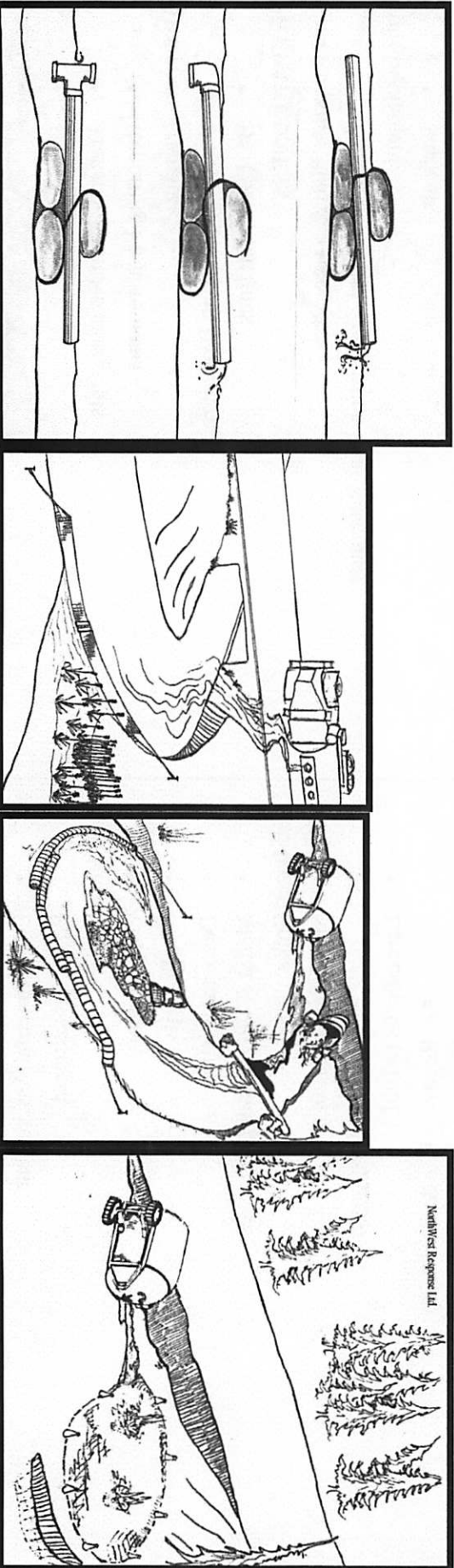
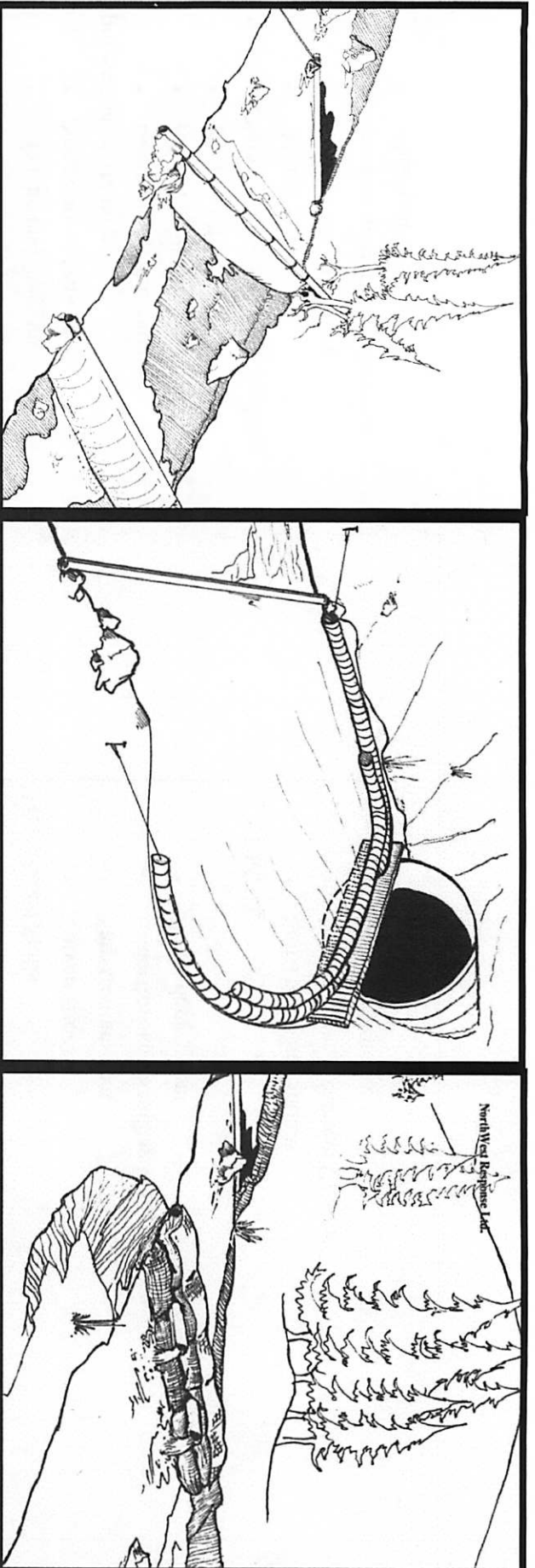
#### **Water-based Spills**

- Culvert Blocks
- Tarp Containment
- Underflow and Sandbag Diversion
- Boom deployment

### **CLOSURE**

- Soil Treatment Options
- Groundwater Treatment Options
- Disposal Options

# Emergency Response Plan - Priority Action Steps



## *Emergency Response Plan - Assessments*

### ***SAFETY ASSESSMENT***

- Attend to injured persons (First Aid).
- Is it safe to work in or around the spill?
- What protective equipment is required?
- Have all the hazards been identified and confirmed?
- Is flammability of the spilled product a concern?
- Monitor vapor levels.
- Prioritize the Safety Action Plan.
- Work with the buddy system - never alone.

### ***SPILL ASSESSMENT***

- Identify the tank volume.
- Identify the product spilled & the cause of the spill.
- Note duration of spill from source.
- Identify the characteristics of the product(s).
- Assess any potential physical/chemical/other hazards.
- Can the spill be stopped or contained?
- Can the spill be contained at the source?
- Can the spill be contained or diverted downstream?
- What equipment will be needed for containment, recovery, clean up and restoration?
- Note the ambient environmental conditions, how will it affect the spilled product.
- Assess the receiving environment.

### ***ENVIRONMENTAL ASSESSMENT***

#### **Land**

- Identify & mark the extent (perimeter) of the spill area.
- Note soil type, slope and any specific characteristics.
- Dig test pits to determine the depth of the spill.
- Determine options for recovery or disposal.

#### **Streams, Creeks & Ditches**

- Determine downstream destination of spilled product.
- Identify down stream back eddies, pools or culverts that may be used to divert or contain the spill.
- Note the depth and the velocity of the water.
- Identify the soil and vegetation along stream.
- Identify areas where fish may spawn, bird habitats, and other areas used by wildlife.

#### **Lakes, Ponds & Lake Foreshore**

- Visually inspect the foreshore to identify the extent of contamination.
- Note where the product is pooling along shore.
- Note any marsh areas that must be protected with exclusion and/or diversion booms.
- Identify the main slick, rate of spreading and potential downstream areas that may be impacted.
- Determine options for containment and recovery.



## *Emergency Response Plan - Priority Action Steps*

<i>Priority</i>	<i>Response Action</i>
<b>1. Act Fast And Think Safety</b>	<ul style="list-style-type: none"> <li>• Use Common Sense!</li> <li>• Use appropriate safety procedures and personal protective equipment prior to initiating response plan.</li> <li>• Prior to taking any action, made a complete assessment of the incident to ensure that the limited resources are used effectively.</li> <li>• An intense &amp; quick response is essential to minimize the potential impact on the environment.</li> </ul>
<b>2. Notification</b>	<ul style="list-style-type: none"> <li>• Immediately report all spills of 100 litres or more of petroleum products (Class 3 Flammable Liquids and Waste Oil) to PEP.</li> <li>• Immediately report all spills of deleterious substances to a water course to PEP.</li> <li>• Complete a spill report form, including: Who, What, Where, Why, When and How.</li> </ul>
<div> <div> <b>PEP</b> <i>(Provincial Emergency Program)</i> </div> <div> <b>800-663-3456</b> </div> </div> <div> <b>Ministry of Environment (MoE)</b>  <i>Regional Office</i> </div>	
<b>3. Containment and Recovery</b>	<p><u>Spill to Land</u></p> <ul style="list-style-type: none"> <li>• Mark the perimeter of the spill. Dig recovery ditches around the perimeter and recovery pits (sumps) within the spill area.</li> <li>• Continually monitor the ditches and recovery pits to ensure the collection system is effective.</li> <li>• Use absorbent pads, fire or other means to remove free product and excavate the contaminated soil. Determine the extent of spill.</li> <li>• Pump the product from the containment area or obtain approval from Ministry of Environment for alternate disposal options.</li> </ul> <p><u>Spill to Water</u></p> <ul style="list-style-type: none"> <li>• In a ditch or stream contain the spill using tarp containment system, underflow system or containment booms.</li> <li>• To effectively contain the spill, use several containment methods in series.</li> <li>• Divert and corral the spilled product to the containment system using absorbent booms and/or synthetic booms.</li> <li>• Continue to sweep and corral the spilled product to one corner. Add a second containment boom if required.</li> <li>• Use absorbent pads and/or pumps to collect the spill products from the containment area.</li> <li>• Use sweeps and absorbent pads to recover the product. Use a wringer to extract the excess product then reuse the absorbent pads.</li> <li>• Use a skimmer or suction pump (i.e. pump/vacuum truck) if the volume is significant and the spill is contained.</li> <li>• Develop a monitoring program to assess and remove free product over a given time frame.</li> </ul>
<b>4. Disposal &amp; Site Restoration</b>	<ul style="list-style-type: none"> <li>• Confirm disposal options and approval with Ministry of Environment.</li> <li>• Take photos and notes to document the spill incident, response and clean up.</li> <li>• Ensure confirmatory samples are taken and the results are properly documented and kept on file.</li> </ul>