

## **APPENDIX L**

### **SPILL PREVENTION AND CONTINGENCY PLAN**

This document is a preliminary Spill Prevention and Contingency Plan for the MGEC. A Spill Prevention and Contingency Plan will be finalized prior to initiating construction at the site. A separate Spill Prevention and Contingency Plan will be developed prior to commissioning of the MGEC for implementation during operation of the facility. These plans will be developed by Mackenzie Green Energy LP (MGELP) in consultation with regulatory agencies having responsibility for spills and emergency response, including the BC Ministry of Environment and, in the case of an emergency, the local first responders such as fire and ambulance services. The review will ensure the plan meets all regulatory requirements and incorporates the commitments made in this Application for an Environmental Assessment Certificate.

The Spill Prevention and Contingency Plan will include provisions to:

- reduce and stop the source of spills;
- contain, clean and dispose of spilled substances; and
- provide appropriate training to employees.

Examples of materials that could potentially be spilled at the MGEC are:

- chemicals used in the treatment of water, or for other purposes required in the MGEC processes;
- paints and solvents;
- herbicides;
- antifreeze;
- fuels;
- lubricants; and
- petroleum products.

MGELP will provide training to its staff in the areas of waste management, pollution control, and emergency response and planning that are relevant to their duties. MGELP will educate its employees to make them aware of the different materials which will be at the MGEC site during construction, operation, and maintenance activities. This will include highlighting the appropriate response to significant spills of each material used on the site and the effects that could potentially arise to human health and the environment. Regular meetings will be held to discuss and reinforce good health and safety practices in regard to spills and spill containment. An MGELP employee will be designated as a Health and Safety Representative and oversee the preparation and implementation of the Spill Prevention and Contingency Plan. Training will be provided to designated employees on spill response and clean-up procedures.

### **General Guidelines for Responding to Spills**

Together with the response at specific levels detailed below, the following general guidelines for clean-up of spills will be followed by MGEC employees:

1. Attend to any persons who may be contaminated. Contaminated clothes will be removed immediately and the skin flushed with water. Clothing will either be disposed of accordingly or laundered before reuse depending on the nature of the spill.

2. Immediately warn others of any spilt volatile materials, control sources of ignition, and ventilate the area.
3. Ensure that all staff and workers on site wear personnel protective equipment appropriate to the hazard.
4. Ensure that appropriate respiratory equipment is used, if needed.
5. Protect floor drains to prevent environmental release. Absorbents and/or barriers will be placed around drains as needed.
6. Scoop all the absorbed material up using non-sparking tools and place materials in a container. Polyethylene bags for small level 1 spills and 5 – 20 gallon drums with polyethylene liners for larger spills.

### **Response and Clean-Up Procedures**

MGELP will implement response and clean-up procedures as part of the Spill Prevention and Contingency Plan. Employees will be trained in all aspects of spill hazards.

The following procedures will be followed by appropriately trained employees:

1. Spills will be contained and cleaned up promptly after they occur.
2. Hazardous materials and wastes will be kept in covered and secured containers.
3. Spill clean-up materials will be easily accessible in areas where spills are more likely to occur.
4. Spills will be covered and protected from storm water run off.
5. Storage and disposal of used cleaning materials, contaminated materials and recovered spill material will be done in accordance with provincial regulations.
6. Appropriate clean-up equipment will be used; this will depend on the nature and location of the spill.
7. There will be spill clean-up kits available onsite during the construction and operation phases.
8. Rags for small spills on paved surfaces will be used, damp cloths for general clean-ups and absorbent materials for larger spills. Absorbents used for the clean-up of hazardous materials will also be designated hazardous and will be disposed of as a hazardous material.
9. Spills will never be hosed down or buried.

MGELP will undertake regular inspections of the site during construction and throughout operations. The inspections will determine whether the right materials are in place ready to use if a spill should occur. This will be done under the control of the Health and Safety Representative.

## **Spill Response levels I - III**

### ***Level I - Minor Spills***

A minor spill is typically a small quantity of oil, gasoline, paint, etc., which can be controlled by the first responder when the spill is first discovered. Absorbent materials will generally be used on minor spills. The absorbent materials will be removed and disposed of in a designated area immediately. The following sequence will be used for all minor spills:

1. Contain the spread of the spill;
2. Recover spilled material; and
3. Clean the contaminated area and properly dispose of the contaminated materials.

### ***Level II - Medium Spills***

Medium spills can still be controlled by the first responder, but will usually involve more than one person to aid in the clean-up. This spill may require all other activities in the area to cease, until the area is cleaned and it is safe to start working again. If the spill occurs on paved areas or impermeable surfaces, then dry methods (absorbent materials, rags and cat litter/sand) will be used. The spill will be contained by encircling the spill with the absorbent material creating a berm. There will be an initial emphasis on minimizing spill spread. If the spill occurs on a permeable area then immediately an earthen dike will be constructed. All material affected by the spill will be dug and disposed of appropriately. If it is raining at the time of the spill, then tarpaulins will be used to cover the spill to reduce water infiltration and contamination.

The following approach will be used for all medium spills, in sequence order:

1. Contain the spread of the spill;
2. Notify the Foreman and the Health and Safety Representative immediately;
3. Recover the spill material with the aid of another person;
4. The Foreman and the Health and Safety Representative will determine when it is safe to return to normal work.

### ***Level III - Major Spills***

Major spills include those which are considered a major incident and need the attention of more than two people. A spill of a hazardous material is also considered a Major Spill. In all incidents, the first priority will be the safety of all persons in the area of the spill. If the spill can safely be contained then initial measures following those listed for a medium spill should be followed. The Health and Safety Representative for MGEC should be contacted immediately. All equipment in the area should be shut down and work by all employees stopped immediately. There will be an initial emphasis on spill containment.

Construction personnel should not clean up any spill until a qualified team designated by MGELP is at the spill scene.

For major spills that can not be controlled by the resources at MGEC the following steps will be implemented:

1. The local emergency response team will be notified by calling 911. This will determine whether the police or other services are needed at the spill scene. Additionally, the local fire department will be contacted separately.
2. The Health and Safety Representative will notify:
  - (i) District of Mackenzie Fire Department at (250) 997-4221 or cell phones:  
Fire Chief (250) 997-7401  
Deputy Chief (250) 997-7402
  - (ii) A Haz-Mat Response Team services (previously identified);
  - (iii) The Regional District of Fraser-Fort George by dialling (250) 960-4486;
  - (iv) The BC Emergency Spill Response by dialling 1-800-663-3456.

Initial notifications will be made by telephone and a written report will then be sent to all parties involved. Either the Health and Safety Representative or another designated person will detail and log all actions from the time of the spill to the time of the final clean-up. The log will list all persons involved, their roles and activities, what was spilt, where it spilt, any environmental concerns identified, and health and safety issues. Contact details will be gained from all persons involved.

### ***Storage of Spill-Contaminated Material***

Storage areas for spill-contaminated materials will be designed by MGELP. A plan to manage this type of material will be developed, and will include:

- A list of names, addresses and phone numbers of all persons qualified to act as emergency coordinators.
- A list of all emergency equipment at the storage area, such as fire extinguishing systems, communications and alarm systems, and decontamination equipment.
- The location and a physical description (drawing) of each major item in the storage area.
- An evacuation plan for the MGEC and employees.
- The use of placards on trucks, inventories of contaminated materials, and manifesting of contaminated materials entering and leaving the site.