CEAA ENVIRONMENTAL

ENVIRONMENTAL IMPACT ASSESSMENT

AMBASSADOR BRIDGE ENHANCEMENT PROJECT

Replacement Span and Plaza Expansion

APPENDIX C

SPILL PREVENTION AND CONTINGENCY PLAN

1.0 INTRODUCTION

1.1 Plan Purpose

Despite the Ambassador Bridge's best efforts to prevent spills, no physical operation can attain zero risk. Acts of God, accidents and malfunctions can occur from time to time that result in a spill. To prevent such spills from leaving the site, design features are included in the Enhancement Project. Nevertheless, diligent operational procedures are also required to avoid accidental losses.

The purpose of the plan is to provide a response to spills to minimize:

- Danger to persons;
- Pollution of land and water;
- Size of the affected area;
- Degree of disturbance to plants, fish and animals; and
- Degree of disturbance during cleanup.

This Spill Prevention and Contingency Plan identifies the types of spills that may occur, and provides procedures to respond to such emergencies. This Plan shall supplement other Ambassador Bridge manuals / plans.

The purpose of this Plan is to initiate an immediate response with trained personnel and equipment to clean-up any accidental spill and ensure minimal impact to the land or aquatic environment in the immediate and surrounding area. The Plan includes procedures for cleanup, notification of appropriate authorities when necessary, containment, disposal, and monitoring, including details regarding equipment and personnel allocations.

This Plan is a living document, and would be amended as required, to accommodate change in construction, operational procedures, regulations and guidelines. It first describes the Ambassador Bridge facilities as a component of the Enhancement Project followed by the contingency measures to support them. Onsite operations are planned to run year round, twenty four hours a day due to the demanding nature of an international bridge crossing with respect to its integral role in international traffic and trade.

An abbreviated version of the plan will be posted for all Ambassador Bridge staff, contractors, and visitors to the Enhancement Project site. Ambassador Bridge staff will be trained on this Plan.

1.1.1 Pre-Spill Planning

Noting the nature of the Construction and Operation phases of this project and the very limited quantities of hazardous materials on site at anytime, the possibility of a large spill is very remote. The text that follows applies to the most likely spill scenario to be encountered, i.e. a small spill needing immediate attention by staff on site.

Hazard Identification

Each Phase of construction and operation will be examined to identify the potential hazards. A Workplace Hazardous Materials Information System sheet will identify all hazardous compounds coming on site and this information will be available to all personnel. Workplace Hazardous Materials Information System training will be provided to all employees. Hazardous compounds will be stored in secure locked containers on site in secured enclosures.

Risk Analysis

The greatest risk for spills during the Construction and Operation Phases of the Enhancement Project will be from petroleum products. These spills will be contained quickly with the available onsite spill equipment. Locations throughout the project will be sufficiently equipped with spill absorbent materials and other tools to address and contain a small spill. In the unlikely event of larger contaminant spills, such as major accidents during operation, emergency response procedures will be utilized.

Resources Available

Emergency response for spills will be available, when necessary. Local environmental clean-up companies along with local emergency services will be called upon if a larger spill occurs. Response will be consistent with specifications in the Environmental Protection Act, Part X.

Initial Alerting

Timely and accurate reporting of an accidental spill can help to ensure quick and efficient response. This Plan includes detailed information regarding both general and specific notification procedures.

1.1.2 Spill Criteria

A pollutant, as defined by Part X of the Environmental Protection Act means a contaminant other that heat, sound, vibration or radiation, and includes any substance from which a pollutant is derived (R.S.O. 1990, Chapter E. 19). "Spill" when used with reference to a pollutant, means a discharge, (a) into the natural environment, (b) from or out of a structure, vehicle or other container, and (c) that is abnormal in quantity in light of all the circumstances of the discharge (R.S.O. 1990, Chapter E. 19).

It should be noted that O. Reg. 675/98, Classification and Exemptions of Spills, indicates that the majority of the potential spills that could occur during the Operation Phase of the Enhancement Project will be Class VI. A Class VI spill is a spill of not more than 100 litres of fluid, other than fluid transported as cargo, from the fuel system or other operating system of a motor vehicle (0. Reg. 675/98, s. 6 (1)). Class VI spills are exempt from subsections 92 (1) (a) and 92 (3) and (4) of the Environmental Protection Act, provided the spill does not enter any waters.

1.2 Applicability

This Spill Prevention and Contingency Plan is primarily aimed at hydrocarbon spills due to the large amount of fuel in storage, it also covers chemical spills and gaseous releases. If the incident is not part of normal operations, and there is doubt, it will be treated as a spill.

1.3 Ambassador Bridge Policy on Initiating Cleanup Activities

The Ambassador Bridge will assist in initiating clean up activities when necessary. The guiding principles of the Ambassador Bridge Spills Prevention and Contingency Plan is to comply with existing regulations to ensure protection of the environment, and to keep employees, government officials and the public aware of our Plan.

2,0 ROLES AND RESPONSIBILITIES

2.1 Response Coordinator

The role of the Response Coordinator is to oversee the emergency response to a spill at the plant. The responsibilities of the Response Coordinator will be as follows:

a) The Response Coordinator directs all operations but does not get directly involved in the clean-up activities.

b) The Response Coordinator decides when the spill incident is under control.

c) All information about the spill should be directed to the Response Coordinator and any changes in the situation should be reported to him.

2.2 Generation Manager

The Generation Manager or his designate will be the Response Coordinator and oversee the emergency response to spills.

His or her designate will be the sole communicators for reporting spills to the government, municipality, and other agencies, when necessary.

2.3 Shift Supervisor

The Shift Supervisor will assume the role of Response Coordinator when deemed appropriate by the Generation Manager.

For all spills, the Shift Supervisor will assume the role of Response Coordinator until the Generation Manager or his designate is able to take over. He or she will commence the initial response and take immediate action to stop, reduce the spill and contain the spill to ensure no endangerment to the health and safety of workers or the public.

2.4 Safety Officer

The Safety Officer will monitor the safety of workers during the response activities. **2.5**

Environmental Health and Safety Officer

The Environmental Health and Safety Officer will be an advisor to the response team and monitor extent of spill.

2.6 Other Staff

All staff have a responsibility to report spills immediately to the Shift Charge Supervisor and assist as directed with spill response.

3.0 STANDARD PROCEDURE FOR ANY SPILL

Consider the safety of all persons first. If any personnel have been affected or injured by the spill, the Diagnostic Clinic should be contacted immediately for advice on treatment. Medical attention should be rendered as soon as possible.

3.1 Identification of Spill

a) All employees must inform the Shift Supervisor at once, of a spill.

b) If the employee can safely stop the spill at the source, this should be done.

c) The Shift Supervisor will investigate and confirm the spill. He will:

- Determine the source, if possible;
- Assess the size and nature of the spilled material (oil, chemicals);
- Mobilize a response team to take immediate action to stop or reduce the spill and contain it, without endangering the health and safety of the workers or local population;
- Take action to reduce hazards to persons working near the spill;
- Contact the appropriate regulatory agencies where necessary.

d) The Shift Supervisor will assume the role of Response Coordinator for most minor spill incidents unless relieved as below.

e) The Generation Manager or designate should be called to assume the role of Response Coordinator if the spill is considered major, such as:

- A bulk oil tank rupture;
- A fuel pipeline rupture;
- A release of oil or chemical outside of Ambassador Bridge property;
- A release of oil to the Detroit River;
- A spill to the storm water drainage system that has the potential for release to the Detroit River; or
- It requires additional resources such as mobilizing equipment contractors for response.

3.2 Response

a) Take any actions necessary to prevent the spill from contaminating groundwater or offsite surface water (e.g. clean-up using an absorbent material mixed with sand).

b) If the spill has the potential to leave the site via runoff to the Detroit River then the Generation Manager or designate must contact the Ministry of the Environment Spills Action Centre immediately and keep close contact with the Ministry of the Environment while the response is underway. Refer to Section 6 of this plan for coordinating a response with Ministry of the Environment Spills Action Centre.

c) Actions for the different spill types are documented as follows:
- Oil spills to land see Section 4;
- Oils spills to Detroit River see Section 5;
- Chemical spills see Section 6; and
- Gaseous releases see Section 7.

3.3 Documentation

a) The Shift Supervisor involved in the spill discovery will complete a Spill Reporting Form of the incident as soon as possible and provide copies to the Safety Officer and the incoming Shift Supervisor. A copy of this form is contained in Appendix A.

b) A daily log will be maintained of the spill cleanup activities.

c) A full report of the incident shall be completed by the Response Coordinator or designate. The report should provide the following information:

- The date and time of spill;
- The name of the personnel involved in initial response;
- Location of incident;
- The substances involved (estimated quantity);
- Actions taken to respond (containment, cleanup);
- Government and agency personnel contacted;
- Media involvement (if any);
- Evaluation of response effectiveness;
- Description of ongoing requirements (remediation of soils, monitoring. etc);
- Identification of cause;

- Recommendations for prevention of future incidents; and
- Other relevant information.

3.4 Government Notification

a) The Ministry of the Environment Spills Action Centre should be notified of all spills. A written report should be provided as soon as practical (within one week) giving details of actions taken.

b) For spills that impact the Detroit River or off site, the Ministry of the Environment Spills Action Centre should be notified immediately by the Generation Manager or designate.

3.5 Communications

a) All external communications to government agencies or the media shall go through the Generation Manager or designate.

b) Employees must refrain from making statements about the incident to the media (such as newspaper, radio, television) and refer these enquiries to the Generation Manager or designate.

c) Employees must refer any enquiries from regulatory personnel to the Generation Manager or designate.

4.0 RESPONSE TO OIL SPILLS ON LAND

Consider the safety of all persons first.:

a) The oil should be prevented from escaping to storm water drains;

b) Collect the oil or soak up material using absorbent material.

c) Once the spill cleanup is completed, place the used absorbent pads or contaminated materials into drums for appropriate disposal. Disposal will be coordinated with the Ministry of the Environment Spills Action Centre.

d) Contaminated soils should be excavated and replaced with clean fill.

e) Oil soaked sand or soil will be removed where necessary.

Larger Quantity spills:

a) Obtain plastic tarp(s), absorbent sheeting, or other ultra-dry absorbent and any other necessary spill containment equipment, hoses, etc.

b) A berm of soil should be constructed down-slope from the seepage or spill.

c) Provide containment of spill at outfall locations and storm drain outlets.

d) A tarp can be placed in such a way that the fuel can pool for collection and removal (such as at the foot of a berm).

e) If there is a large volume of spilled product, pump the oil into spare empty drums and store in a secure area for appropriate disposal.

f) Absorbent sheeting or sand can also be used to soak up spilled oil.

g) Contaminated soils should be excavated and replaced with clean fill.

h) Once the spill cleanup is completed, place the used absorbent pads or contaminated materials into the drums for disposal. Disposal will be in accordance with regulatory requirements.

5.0 RESPONSE TO OIL SPILLS IN THE DETROIT RIVER

Consider the safety of all persons first.

a) Spills to the Detroit River shall be promptly reported by the Generation Manager or designate and the Ministry of the Environment Spills Action Centre, and the municipality.

b) Relevant contact numbers for the Ministry of the Environment Spills Action Centre and municipality are provided in Section 10.

c) The spill notification should be as complete as possible and include:

   a. Name, address and telephone number of reporting source;

   b. On-scene telephone number;

   c. Exact location and time of spill;

   d. Estimated amount and type of pollutant;

   e. Source of pollutant and cause of spill;

   f. Actions being taken to control spill;

   g. Wind speed and direction;

   h. The damage observed.

d) Ambassador Bridge personnel will be responsible for the immediate cleanup activities.

6.0 RESPONSE TO CHEMICAL SPILLS

Consider the safety of all persons first. If any personnel becomes affected or injured by the spill during response, the Diagnostic Clinic should be contacted immediately for advice on treatment. Medical attention should be rendered as soon as possible.

a) The Safety Officer should be notified immediately.

b) Determine chemical released (refer to Inventory of Chemicals in Appendix B).

c) Refer to Table 6-1 for response to releases of commonly used chemicals.

d) If possible, review the Manufacturers Safety Data Sheets (MSDS) of the material spilled before starting clean up to ensure safe procedures are in effect.

e) Assemble the necessary safety equipment before attempting to contain the spill, (such as latex or other protective gloves, goggles or safety glasses, masks or breathers, etc.).

f) Apply absorbents to soak up liquids (refer to MSDS for appropriate type).

g) Place plastic sheeting over solid chemicals, such as dusts and powders, to prevent them from spreading by wind and to prevent attraction by birds or other mammals.

h) Neutralize acids or caustics (refer to MSDS sheet). Place spilled material and contaminated cleanup supplies in an empty refuse drum and label and seal drums for appropriate disposal.

i) The disposal containers must be transferred to a secure storage area for future disposal. Disposal will be completed in accordance with the applicable regulatory requirements.

7.0 RESPONSE TO GASEOUS RELEASES

Consider the safety of all persons first.

a) The Safety Officer should be notified immediately.

b) Assess the hazard of the released material by referring to the Manufacturers Safety Data Sheets (MSDS) where possible.

c) Attempt to shut off the source if it is safe to do so.

d) Determine if there are safety issues for on site and off-site and take action.

e) If it is a natural gas leak contact the Ministry of the Environment Spills Action Centre, the appropriate utility and the municipality.

f) If releases of sulphur hexafluoride occur ensure that personnel do not enter without personal protective equipment (self contained breathing apparatus).

For most gaseous releases there is no ability to capture the release and hence the response is to shut off the source and rely on dispersion. As these releases can affect persons on neighbouring properties, it is important to observe wind direction and conditions to assess areas of potential impact.

8.0 RESPONSE EQUIPMENT

8.1 General Equipment

The Ambassador Bridge has maintenance vehicles and heavy equipment available to respond to emergencies and spills. The current facilities are well equipped to respond to emergencies and spills and the same standard will be kept throughout the Enhancement Project Construction and Operation.

8.2 Spill Kits

Complete spill kits will be available on both sides of the Ambassador Bridge located in the Windsor and the Detroit plazas during the Enhancement Project Construction and Operation Phases.

The following items will be contained in each spill kit:

1 45 gallon, 16 gauge open top drum, c/w bolting ring and gasket

1 package polyethylene disposable bags

2 personal protective equipment packages: nitrile gloves, splash goggles, poly coated Tyvek® suit and boots.

1 shovel (spark proof)

4 123 inch x 10 feet absorbent booms

100 16' inch x 20 inch universal absorbent mats

1 roll oil only absorbent mats 150 feet x 33 inches

12 drain cover, neoprene 36 inch x 36 inch

1 roll barrier tape, 300 feet.

1 list detailing contents of spill kit

1 set of instructions on use of each item in spill kit Individual Spill Kit

20 absorbent pads

2 absorbent socks

10 refuse bags

2 goggles and gloves

In the case of large spills, spill kit inventory and off-site materials can be called upon. Other materials available for spill response from outside and on-site sub-contractors include:

- Shovels
- Vacuum trucks
- Booms
- Excavators
- Bags of absorbent
- Loaders

Emergency Back-up

In the event of large spills Ambassador Bridge will call on the resources of commercial spill clean-up companies, and local fire response teams.

9.0 TRAINING

Spill response training will be provided as part of the health and safety program for site personnel. This annual training program will familiarize the staff with the location and use of spill equipment and the need to report all spills to the Segment Manager. The review will focus on:

- Due diligence to prevent spills;
- Safety procedures;
- Roles and responsibilities;
- Spill assessment;
- Site security and safety;
- Characteristics of petroleum products;
- Spill containment and recovery;
- Regulatory reporting obligations;
- Site restoration; and

- Spill documentation.

Field demonstrations of correct procedures for spill response and mitigation will be scheduled periodically during mass safety meetings for each Project Segment.

10.0 UPDATE AND REVIEW

The Spill Prevention and Contingency Plan will be reviewed and updated as information changes or at least annually. The review should include checks of all relevant contacts (confirmation of correct telephone numbers) and availability of resources. The most recent review of the plan was completed in May 2012.