Ministry of the Environment and Climate Change

Source Protection Programs Branch

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Ministère de l'Environnement et de l'Action en matière de changement climatique

Direction des programmes de protection des sources

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Ontario

September 15, 2014

Mr. Chris Tasker,
Thames, Sydenham and Region Source Protection Project Manager
Upper Thames River Conservation Authority,
1424 Clarke Road London, Ontario, N5V 5B9

Dear Mr. Tasker:

We are in receipt of your email dated August 22, 2014 requesting a Director's opinion under Technical Rule 119 on the addition of the following local threat for the Lower Thames Valley Source Protection Area (LTVSPA):

- Transportation of fuel along provincial highways, county and local roads, railways and waterways along corridors that pass through vulnerable areas in the LTVSPA.

This activity, among other activities, was approved as a local threat for the St. Clair Region Source Protection Area (SCRSPA) on September 11, 2011.

In accordance with my authority under Rules 119, 120, or 121, I am of the opinion that the hazard rating is greater than 4 for this activity. Therefore, the transportation activity as set out in Table 1 is approved as local threat in the LTVSPA. Table 1 is presented in a format similar to the tables of drinking water threats and provides the vulnerability score necessary for an activity to be a significant, moderate or low drinking water threat.

We understand you may be evaluating this activity using the event based modelling approach allowed under Technical Rules 68 and 130. Under that approach, the vulnerability scores in Table 1 are not used to evaluate the threat: instead modelling determines if the activity is a significant threat. The table has been provided to meet the Technical Rules requirements associated with adding a local threat.

Your rationale for the inclusion of this local threat along with a copy of this letter must be included in your amended assessment report.

Sincerely,

Ling Mark, Director
Source Protection Programs Branch
Ministry of the Environment and Climate Change

c:

Robert Bedggood, Source Protection Region Chair, Thames, Sydenham and Region Source Protection Committee
Heather Malcolmson, Manager, Source Protection Approvals
Marie LeGrow, Manager, Source Protection Planning
Teresa McLellan, Liaison Officier, TSR, Source Protection Implementation

ACTIVITY, CIRCUMSTANCES, AND AREAS WHERE THE ACTIVITY IS SIGNIFICANT, MODERATE OR LOW THREAT
Lower Thames Valley Source Protection Area

TABLE 1: TRANSPORTATION OF FUELS

TRANSPORTATION OF FUELS						
Activity	Vulnerability Score to produce a Significant DWT		Vulnerability Score to produce a Moderate DWT		Vulnerability Score to produce a Low DWT	
	IPZ-1,2,3, WHPA-E	WHPA-A, B, C, C1, D	IPZ-1,2,3, WHPA-E	WHPA-A, B, C, C1, D	IPZ-1,2,3, WHPA-E	WHPA-A, B, C, C1, D
1. The transportation of Petroleum hydrocarbons (PH) F1 (C6-10). 2. PH F1 (C6-10) is transported in a quantity of 25-250 L or 25-250 kg. 3. A spill may result in the release of PH F1 (C6-10) to surface water.	---	---	---	---	10 – 7.2	10 - 8
1. The transportation of Petroleum hydrocarbons (PH) F2 (>C10-16). 2. PH F2(>C10-16) are transported in a quantity of 25-250 L or 25-250 kg. 3. A spill may result in the release of PH F2(>C10-16) to surface water.	---	---	---	---	10 – 7.2	10 - 8
1. The transportation of Petroleum hydrocarbons (PH) F3 (>C16-34). 2. PH F3 (>C16-34) is transported in a quantity of 25-250 L or 25-250 kg. 3. A spill may result in the release of PH F3 (>C16-34) to surface water.	---	---	10	---	9 – 6.4	10 - 8
1. The transportation of Petroleum hydrocarbons (PH) F4 (>C34-50). 2. PH F4(>C34-50) is transported in a quantity of 25-250 L or 25-250 kg. 3. A spill may result in the release of PH F4(>C34-50) to surface water.	---	---	---	---	10 - 7	10 - 8
1. The transportation of BTEX compounds. 2. BTEX compounds is transported in a quantity of 25-250 L or 25-250 kg. 3. A spill may result in the release of BTEX compounds to surface water.	---	---	10	10	9 – 6.4	8
1. The transportation of Petroleum hydrocarbons (PH) F1 (C6-10). 2. PH F1 (C6-10) is transported in a quantity of >250-2500 L or >250-2500 kg. 3. A spill may result in the release of PH F1 (C6-10) to surface water.	---	---	10	10	9 – 6.4	8
1. The transportation of Petroleum hydrocarbons (PH) F2 (>C10-16). 2. PH F2 (>C10-16) are transported in a quantity of >250-2500 L or >250-2500 kg. 3. A spill may result in the release of PH F2 (>C10-16) to surface water.	---	---	10	10	9 – 6.3	8

TRANSPORTATION OF FUELS

Activity	Vulnerability Score to produce a Significant DWT		Vulnerability Score to produce a Moderate DWT		Vulnerability Score to produce a Low DWT	
	IPZ-1,2,3, WHPA-E	WHPA-A, B, C, C1, D	IPZ-1,2,3, WHPA-E	WHPA-A, B, C, C1, D	IPZ-1,2,3, WHPA-E	WHPA-A, B, C, C1, D
1. The transportation of Petroleum hydrocarbons (PH) F3 (>C16-34). 2. PH F3 (>C16-34) is transported in a quantity of >250-2500 L or >250-2500 kg. 3. A spill may result in the release of PH F3 (>C16-34) to surface water.	---	---	10 - 9	10	8.1 – 6	8
1. The transportation of Petroleum hydrocarbons (PH) F4 (>C34-50). 2. PH F4 (>C34-50) is transported in a quantity of >250-2500 L or >250-2500 kg. 3. A spill may result in the release of PH F4 (>C34-50) to surface water.	---	---	10	10	9 – 6.3	8
1. The transportation of BTEX compounds. 2. BTEX compounds is transported in a quantity of >250-2500 L or >250-2500 kg. 3. A spill may result in the release of BTEX compounds to surface water.	---	---	10 - 9	10	8.1 - 6	8-6
1. The transportation of Petroleum hydrocarbons (PH) F1 (C6-10). 2. PH F1 (C6-10) is transported in a quantity of >2500 L or > 2500 kg. 3. A spill may result in the release of PH F1 (C6-10) to surface water.	---	---	10	10	9 – 6.4	8-6
1. The transportation of Petroleum hydrocarbons (PH) F2 (>C10-16). 2. PH F2 (>C10-16) are transported in a quantity of >2500 L or > 2500 kg. 3. A spill may result in the release of PH F2 (>C10-16) to surface water.	---	---	10	10	9 – 6.3	8-6
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1. The transportation of BTEX compounds. 2. BTEX compounds is transported in a quantity of >2500 L or > 2500 kg. 3. A spill may result in the release of BTEX compounds to surface water.	---	---	10 - 9	10-8	8.1 – 6	6