

Ministry of  
the Environment

Source Protection Programs  
Branch

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November 19, 2010

Mr. Rob McRae  
Catawaqui Region Source Protection Authority  
1641 Perth Road, P.O. Box 160  
Glenburnie Ontario K0H 1S0

Dear Mr. McRae,

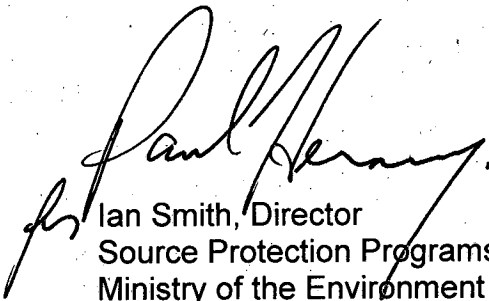
This letter is to update the letter previously sent to you, dated June 21, 2010, which provided the Director's opinion regarding the addition of transportation of specified substances along corridors as a local drinking water threat.

Please note that there was an error in the June 21, 2010 letter with respect to the hazard rating for vinyl chloride. The circumstance relating to the transportation of a DNAPL containing vinyl chloride is a moderate threat in IPZ 1, 2, 3 and WHPA-E with a vulnerability score between 7 and 9.

Please see the attached table with the correct hazard rating for vinyl chloride.

A copy of this letter along with your rationale for the inclusion of the local threats must be included in your assessment report.

Sincerely,



Ian Smith, Director  
Source Protection Programs Branch  
Ministry of the Environment

c: Keith Willson, Manager, Source Protection Approvals  
Paul Heeney, Manager, Source Protection Implementation  
Heather Malcolmson, Manager, Source Protection Planning  
Katie Fairman, Supervisor, Source Protection Implementation  
Peter Rider, Senior Drinking Water Program Advisor, Source Protection Planning  
Wendy Lavender, Liaison Officer, CRCA, Source Protection Implementation

**TABLE 1. ACTIVITY, CIRCUMSTANCE, AND HAZARD RATING**

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
<b>FUELS</b>						
1. The transportation of liquid fuel. 2. The fuel is transported in a quantity that is more than 2,500 litres. 3. A spill of the fuel may result in the presence of Petroleum Hydrocarbons F1 (nC6-nC10) in groundwater or surface water.			9 - 10	10	5.6 - 8.1	6 - 8
1. The transportation of liquid fuel. 2. The fuel is transported in a quantity that is more than 2,500 litres. 3. A spill of the fuel may result in the presence of Petroleum Hydrocarbons F2 (>nC10-nC16) / F3 (>nC16-nC34) / F4 (>nC34) in groundwater or surface water.			9 - 10	10	6 - 8.1	6 - 8
1. The transportation of liquid fuel. 2. The fuel is transported in a quantity that is more than 2,500 litres. 3. A spill of the fuel may result in the presence of BTEX in groundwater or surface water.			8 - 10	8 - 10	5.4 - 7.2	6
1. The transportation of liquid fuel. 2. The fuel is transported in a quantity that is more than 250, but not more than 2,500 litres. 3. A spill of the fuel may result in the presence of BTEX in groundwater or surface water.			9 - 10	10	6 - 8.1	6 - 8
1. The transportation of liquid fuel. 2. The fuel is transported in a quantity that is more than 250, but not more than 2,500 litres. 3. A spill of the Petroleum Hydrocarbons may result in the presence of Petroleum Hydrocarbons F1 (nC6-nC10) in groundwater or surface water.			10	10	6.3 - 9	8
1. The transportation of liquid fuel. 2. The fuel is transported in a quantity that is more than 250, but not more than 2,500 litres. 3. A spill of the Petroleum Hydrocarbons may result in the presence of Petroleum Hydrocarbons F2 (>nC10-nC16) in groundwater or surface water.			10	10	7 - 9	8

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
<b>FUELS</b>						
1. The transportation of liquid fuel.			10	10	6.4 – 9	8
2 The fuel is transported in a quantity that is more than 250, but not more than 2,500 litres.						
3. A spill of the Petroleum Hydrocarbons may result in the presence of Petroleum Hydrocarbons F3 (>nC16-nC34) / F4 (>nC34) in groundwater or surface water.						
<b>PESTICIDES</b>						
1. The transportation of pesticides.			8 - 10	8 - 10	5.4 - 7.2	6
2. The total mass of all materials transported that contain the pesticide, in any form including liquid or solid, is more than 2,500 kilograms.						
3. A spill of the pesticide or material containing the pesticide may result in the presence of Atrazine / Dicamba / Dichlorophenoxy Acetic Acid (D-2,4) / Dichloropropene-1,3 in groundwater or surface water.						
1. The transportation of pesticides.			9 - 10	10	6 - 8.1	6 - 8
2. The total mass of all materials transported that contain the pesticide, in any form including liquid or solid, is more than 2,500 kilograms.						
3. A spill of the pesticide or material containing the pesticide may result in the presence of Glyphosate / Metolachlor or s-Metolachlor in groundwater or surface water.						
1. The transportation of pesticides.	10	10	8 - 9	8	4.9 – 7.2	6
2. The total mass of all materials transported that contain the pesticide, in any form including liquid or solid, is more than 2,500 kilograms.						
3. A spill of the pesticide or material containing the pesticide may result in the presence of MCPA (2-methyl-4-chlorophenoxyacetic acid) / Mecoprop in groundwater or surface water.						
1. The transportation of pesticides.			9 – 10	10	5.6 – 8.1	6 - 8
2. The total mass of all materials transported that contain the pesticide, in any form including liquid or solid, is more than 2,500 kilograms.						
3. A spill of the pesticide or material containing the pesticide may result in the presence of MCPB (4-(4-chloro-2-methylphenoxy) butanoic acid) / Metalaxyl / Pendimethalin in groundwater or surface water.						

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
<b>DNAPLS</b>						
1. The transportation of a DNAPL.	10	2 – 10	8 – 9	---	4.9 – 7.2	---
2. A spill of the DNAPL may result in the presence of Dioxane-1,4 in groundwater or surface water.	10	2 – 10	7.2 – 9	---	4.8 – 7	---
1. The transportation of a DNAPL.	10	2 – 10	7 – 9	---	4.8 – 6.4	---
2. A spill of the DNAPL may result in the presence of one or more Polycyclic Aromatic Hydrocarbons (PAHs) / Tetrachloroethylene (PCE) / Trichloroethylene in groundwater or surface water.	10	2 – 10	7 – 9	---	4.8 – 6.4	---
<b>ORGANIC SOLVENTS</b>						
1. The transportation of a DNAPL.	10	2 – 10	7 – 9	---	4.8 – 6.4	---
2. A spill of the DNAPL may result in the presence of Vinyl chloride or another DNAPL that could degrade to vinyl chloride in groundwater or surface water.	10	2 – 10	7 – 9	---	4.8 – 6.4	---
<b>ORGANIC SOLVENTS</b>						
1. The organic solvent is transported in a container.	10	10	7 – 9	8	4.8 – 6.4	6
2. The quantity of organic solvent transported is more than 2,500 litres.	10	10	7.2 – 9	8	4.8 – 7	6
3. A spill of the solvent may result in the presence of Carbon Tetrachloride in groundwater or surface water.	10	10	8 – 9	8	4.9 – 7.2	6
1. The organic solvent is transported in a container.	10	10	8 – 9	8	5.4 – 7.2	6
2. The quantity of organic solvent transported is more than 2,500 litres.	10	10	8 – 9	8	5.4 – 7.2	6
3. A spill of the solvent may result in the presence of Methylene Chloride (Dichloromethane) in groundwater or surface water.	10	10	8 – 9	8	5.4 – 7.2	6
1. The organic solvent is transported in a container.	10	10	8 – 9	8	5.4 – 7.2	6
2. The quantity of organic solvent transported is more than 2,500 litres.	10	10	8 – 9	8	5.4 – 7.2	6
3. A spill of the solvent may result in the presence of Pentachlorophenol in groundwater or surface water.	10	10	8 – 9	8	5.4 – 7.2	6