



**TRANS-NORTHERN PIPELINES INC.  
SITE SPECIFIC RESPONSE PLAN  
LAC DES DEUX MONTAGNES  
273.1 mm PRODUCTS PIPELINE  
OCTOBER 1999**

**PIPELINE DATA**

**Pipe Specification:** 273.1 mm diam., 7.8 mm wt, API5LX46 Line Pipe (LKB to east shore, 939.7 m)  
273.1 mm diam., 12.7 mm wt, API5L Grade B pipe (lake crossing, 2315.4 m)  
273.1 mm diam., 7.8 mm wt, API5LX46 Line Pipe (west shore to Como, 304.9 m)

**Coating Type:** Lake section: Coal tar enamel wrapped with wood lathe  
Land sections: Coal tar enamel

**MAOP:** 1200 psi

**Length Between Valves:** 3,560 metres LKB to Como

**Valve Type:** LKB: M & J 273.1 mm, ANSI 600  
Como: East Block WKM 273.1 mm, ANSI 600

**Product Carried:** Gasoline, Stove Oil, Light Furnace Oil, Diesel, Jet Fuel

**Max. Flow Rate:** 500 m<sup>3</sup> per hour

**Year of Installation:** 1952

## **CONTINGENCY REACTION PLAN**

### **a) For Spill Clean-Up**

- 3.1 If refined oil is observed coming up from the approximate location of the pipeline, then the Line Controller is to be contacted immediately to begin pipeline shutdown proceedings, including the remote closure of the Lake of Two Mountains (LKB) Block Valve and the Como Station Block Valve.
- 3.2 As soon as possible after the pipeline has been shutdown, lockout LKB and the Como Station Block Valve.
- 3.3 TNPI Field Services personnel are to be notified by Line Control either through call-out procedures or contacting Lancaster Headquarters.
- 3.4 The Supervisor Maintenance will notify Eastern Canada Response Corporation Ltd. (SIMEC) of the incident to mobilize the environmental response Contractor.
- 3.5 The TNPI Crisis Command Centre shall be activated. TNPI Head Office will contact the following agencies to advise of the incident:

National Energy Board  
 Transportation Safety Board  
 Fisheries and Oceans Canada, Coast Guard  
 Quebec Ministry of the Environment and Wildlife (MEF)  
 Environment Canada  
 Quebec Safety Authority  
 Seaway Beauharnois  
 Municipalities

### **b) Temporary Pipeline Repairs**

- 3.6 If third party activity is involved, the extent of pipeline damage may be a gouge in the pipe wall, a dent or outright rupture of a section of pipeline.
- 3.7 If the damage is slight, it might be possible to effect temporary repairs using the PLIDCO split repair sleeve EX. Elmbank Stores, provided the pipe curvature is not deformed.
- 3.8 If the damage is greater than 10 in length, or if the pipe curvature is deformed, pipeline replacement will be necessary.

*The following repair scenario is expected on the assumption that pipeline replacement is necessary:*

- 3.9 Excavate pipeline for 30 m westward from the LKB Block Valve. Remove pipe straps from

Como station manifold to prepare for removal of section between East Block Valve and Station Block Valve.

- 3.10 Perform local draindown at LKB Block Valve and Como. Texaco tapping nipple as per M-M-127 Sht. 1 Rev.1. must be welded to pipeline on west side of LKB within the limits of the vault to provide a tapping connection.
- 3.11 Unbolt the flanges (i.e. west side of LKB valve, and west side of Como East block valve) and remove LKB vault.
- 3.12 Install blind flange on LKB block valve west flange.
- 3.13 Insert two (2) MF-Maxi-Disc pigs complete with rattlers from Corrpro Canada into pipeline at LKB valve. *It is assumed that pigs will pass location of damage.*
- 3.14 Install blind flanges with fittings on LKB pipeline flange and west flange of Como east block.
- 3.15 Connect hose onto fittings at Como East block flange and connect hoses to MT Line west.
- 3.16 Connect nitrogen truck to fittings on LKB block valve flange.
- 3.17 Begin purging product into MT Line west by pushing pigs to Como using nitrogen.
- 3.18. **Note:** Some product and nitrogen will escape through ruptured pipeline into Lac des Deux Montagnes. Response Contractor(s) must be co-ordinated with this purging activity to contain escaping product.
- 3.19 Receive pigs at Como.
- 3.20. Change from nitrogen truck to air compressor.
- 3.21 Continue air compressors which will erupt sand from around the ruptured pipeline in the lake bottom, making the excavation target easier to find.
- 3.22 Excavate pipeline using sandsucker , water jetting or submersible pump.
- 3.23 Train divers on use and installation of PLIDCO weld plus ends (video available).
- 3.24 Divers should go down, inspect damaged pipe preferably with underwater video, possibly direct further excavation activities.
- 3.25 Select appropriate method of repair (i.e. PLIDCO split sleeve or PLIDCO weld plus end/cut out).



***If a cut-out is required:***

- 3.26 If a cut-out repair is required, divers are to cut out damaged section of pipe below, using electro arc welding techniques and bring damaged section up to surface to match shape and length of new replacement pipeline.
- 3.27 Divers are to prepare ends of exposed pipeline below, using appropriate techniques monitored by underwater video.
- 3.28 Replacement section ready with weld plus ends attached, suitably marked with clearly identifiable set stop points.
- 3.29 Install replacement section below.
- 3.30 Move air compressor to Como end and push pigs to LKB end, displacing the water in the pipeline through hoses to tank trucks.
- 3.31 Using an air squeeze pump, pressure up the channel section to 1200 psig minimum and hold for at least four (4) hours.
- 3.32 Inspect replacement section underwater and look for bubble tight seal, also inspect throughout test using underwater video.
- 3.33 Monitor buried pipe and water temperature and pipeline pressure throughout test.
- 3.34 When test is completed and deemed acceptable, the line should be prepared to resume operation at fifty (50%) percent MAOP.
- 3.35 Drop air pressure from line, by venting at Como end, push pigs to Como end.
- 3.36 Unbolt blind flanges and reconnect to LKB valves. Remove pipe at Como and extract pigs, then reinstate pipe.
- 3.37 Open LKB valve slowly, allowing product to move into underwater pipe section.
- 3.38 Schedule start-up ex. Montreal with entrained air to be received at Ottawa.

**References:** D'Aragon, Desbiens, Halde associes ltee, Site Specific Response Plan, Deux Montagnes Lake Section

**Drawings:** TNPI Photo-map M-1904-7 Rev. 2  
TNPI MP-6, MP-7  
TNPI CW-3, CW-2220, CW-2221, CW-2222  
TNPI CM-M-16 - Piping and Equipment Layout  
TNPI LKB-C-04 Lake of Two Mountains Block Valve Layout



*TRANS-NORTHERN PIPELINES INC.*

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**SITE SPECIFIC RESPONSE PLAN**  
**DEUX-MONTAGNES LAKE SECTION**

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**JANUARY 1999**

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**TABLE OF CONTENTS**

**1.0 GENERAL INFORMATION ..... 1**

1.1 INTRODUCTION ..... 1

1.2 DESCRIPTION OF THE AREA ..... 1

1.3 CURRENTS AND WEATHER..... 2

**2.0 TELEPHONE DIRECTORY ..... 3**

2.1 ORGANIZATIONS TO ALERT IN CASE OF A SPILL ..... 3

2.2 OTHER ORGANIZATIONS ..... 3

2.3 WEATHER CONDITIONS ..... 3

2.4 HEALTH SECTOR ..... 4

2.5 AMBULANCES ..... 4

2.6 REGIONAL MUNICIPALITIES (MRC) AND URBAN COMMUNITIES..... 5

2.7 MUNICIPALITIES..... 6

2.8 SENSITIVE AREAS ..... 10

    2.8.1 *Water-intake points* ..... 10

    2.8.2 *Nautical activities* ..... 12

    2.8.3 *Herbarium, fishes and birds*..... 17

2.9 CONTRACTORS ..... 18

2.10 ACCOMMODATIONS/MEETING ROOMS ..... 18

**3.0 RESPONSE IN CASE OF A REFINED PETROLEUM PRODUCTS SPILL - DEUX-MONTAGNES LAKE SECTION..... 19**

3.1 DISCOVERY AND ALERT ..... 19

3.2 SETTING UP A COMMAND CENTER ..... 19

3.3 HEALTH PROTECTION..... 22

    3.3.1 *Refined product in water*..... 22

    3.3.2 *Gas fumes from refined product*..... 22

3.4 ENVIRONMENTAL PROTECTION ..... 23

3.5 POSSIBLE OPERATIONS SITES ..... 23

**ATTACHMENT NO.1 : MAPS**

**ATTACHMENT NO. 2 : WIND STATISTICS**

## 1.0 GENERAL INFORMATION

### 1.1 INTRODUCTION

The purpose of this document is to provide the necessary information to enable a quick and efficient response in case of a refined petroleum products spill into the Deux-Montagnes Lake Section. Refined petroleum products transported in the TNPI pipeline include : gasoline, diesel fuel, jet fuel and furnace stove oil.

Topographical maps (Energy, Mines and Resources Canada, 1:50 000 scale: Vaudreuil 31 G/8, Laval 31H/12 and Lachine 31 H/5) cover the concerned section of the Deux-Montagnes downstream from the pipeline. These maps are good information sources and are essential working tools. Nautical charts (Canadian Hydrographic Service - Fisheries and Oceans Canada: Lac des Deux-Montagnes 1510, Rivière des Prairies 1509, Lac Saint Louis 1410) should also be consulted during any intervention to obtain essential data, in particular: water depths, buoy locations, current speeds, swampy areas, etc. The two maps presented in Attachment No.1 contain information pertaining to the pertinent area.

### 1.2 DESCRIPTION OF THE AREA

Deux-Montagnes Lake is a tributary of the Milles-Iles, des Prairies and Outaouais Rivers and the Saint-Louis Lake.

Deux-Montagnes Lake is widely used for recreational purposes such as yachting, fishing and swimming. There are several marinas, yachting clubs, boat launches, beaches along the banks of Deux-Montagnes Lake and adjacent water streams. Fishing is also very popular in particular areas (Vaudreuil Bay and Cove) and it is practiced the whole year. During the winter season, the lake surface is entirely frozen.

Several parks are found on its banks: Parc d'Oka, Parc-nature du Cap-Saint-Jacques, Parc-nature du Bois-de-l'Ile-Bizard, Parc-nature de l'Anse-à-l'Orme. Several activities are practiced in these parks: camping, nautical activities, swimming, fishing.

Deux-Montagnes Lake and adjacent water streams are also a source of drinking water: several water plants draw water from them to supply municipalities in the region.

The banks are generally accessible via Road 344 on the north bank and via Bord du Lac Rd. (Ile-Bizard), Les Érables Str. (Laval), Senneville Rd. (Senneville), Anse Rd. (Vaudreuil-Dorion) on the south bank. Highways 13, 40 and 640 are the main roads in the sector.

### 1.3 CURRENTS AND WEATHER

A current speed of 0.5 knot (punctual data), thus 0.9 km/hr, near the pipeline is given on Lac des Deux Montagnes nautical chart (Canadian Hydrographic Service). No other current speed data is available from this chart for this area. Drift time, in hours, from the pipeline indicated on maps found in Attachment No.1 is based on this speed value. In order to get more precise data on propagation of a hydrocarbon slick, current modeling could be undertaken by Environment Canada.

Wind speed and direction also play an important role in the propagation of a hydrocarbon slick. A hydrocarbon slick will generally follow the shoreline opposite to the direction of the wind. As the region's dominant winds come mostly from south-west and west (almost 50% of the time), there is a strong likelihood that a hydrocarbon slick will drift along the north bank of the Deux-Montagnes Lake. An annual average wind speed of 16km/hr is associated to these wind directions.

## 2.0 TELEPHONE DIRECTORY

Note : When updating this information, it is important to ensure that the corrections are made to each of these pages.

### 2.1 ORGANIZATIONS TO ALERT IN CASE OF A SPILL

| <u>ORGANIZATIONS</u>   | <u>PHONE NUMBER</u> |
|--|---------------------|
| <b>Fisheries &amp; Oceans Canada, Coast Guard</b><br>(Alert and Warning Network) (24 hrs)          | 1-800-363-4735      |
| <b>Quebec Ministry of the Environment and Wildlife (MEF)</b><br>Monday to Friday (9h00 to 17h00) : |                     |
| Regional Office – Laurentides Direction (Oka to Deux-Montagnes)                                    | (450) 623-7811      |
| Regional Office – Montérégie Direction (Vaudreuil to Maple Grove)                                  | (450) 928-7607      |
| Regional Office – Montreal (West Island)   | (514) 873-3636      |
| Emergencies (24hrs) :  | (514) 873-3454      |
| <b>Environment Canada</b> (Emergencies – 24 hrs) :   | (514) 283-2333      |

### 2.2 OTHER ORGANIZATIONS

| <u>ORGANIZATIONS</u>  | <u>PHONE NUMBER</u> |
|---|---------------------|
| <b>Sécurité civile</b> (Quebec Safety Authority)<br>Direction Montréal – Laval – Lanaudière – Laurentides – Montérégie: | (514) 873-1300      |
| Emergencies (24hrs) :   | (418) 643-3256      |
| <b>National Energy Board :</b>  | 1-800-632-1663      |
| <b>Transportation Safety Board of Canada :</b>  | (514) 633-3246      |
| <b>Seaway Beauharnois</b> (Emergencies - 24hrs) :   | (450) 672-4270      |
| (Maritime traffic between St-François Lake and St-Lambert lock)   |                     |

### 2.3 WEATHER CONDITIONS

| <u>ORGANIZATIONS</u>  | <u>PHONE NUMBER</u> |
|---|---------------------|
| <b>Environment Canada</b>   |                     |
| Local Forecast Recording (French) :   | (514) 283-3010      |
| Local Forecast Recording (English) :  | (514) 283-4006      |
| Weather One-on-One (Bilingual) :  | 1-900-565-1111      |
| <b>Transports Quebec</b> (Road Conditions) – (from Nov. 1 <sup>st</sup> to end of April): | (514) 873-4121      |

**2.4 HEALTH SECTOR**

| <u>ORGANIZATIONS</u>   | <u>PHONE NUMBER</u> |
|--|---------------------|
| <b>Centre Hospitalier du Suroît</b><br>600, Hardwood Blvd.<br>Vaudreuil-Dorion           | (450) 455-9409      |
| <b>Centre Hospitalier Anna-Laberge</b><br>200, Brisebois Str.<br>Châteauguay             | (450) 699-2425      |
| <b>Cité de la Santé de Laval</b><br>1755, René Laennec Blvd.<br>Vimont (Laval)           | (450) 668-1010      |
| <b>CLSC Lac Saint-Louis</b><br>180 Cartier Str.<br>Pointe-Claire                         | (514) 697-4110      |
| <b>CLSC La Presqu'Île</b><br>490, Hardwood Blvd.<br>Vaudreuil-Dorion                     | (450) 455-6171      |
| <b>CLSC Pierrefonds</b><br>13 800, Gouin West<br>Pierrefonds                             | (514) 626-2572      |
| <b>Hôpital Général du Lakeshore</b><br>160, Stillview<br>Pointe-Claire                   | (514) 630-2225      |
| <b>Hôpital du Sacré-Coeur de Montréal</b><br>5400, Gouin W.<br>Montreal                  | (514) 338-2222      |
| <b>Hôpital Ste-Anne</b><br>305, des Anciens Combattants Blvd.<br>Sainte-Anne-de-Bellevue | (450) 457-3440      |

**2.5 AMBULANCES**

| <u>ORGANIZATIONS</u>   | <u>PHONE NUMBER</u> |
|--|---------------------|
| <u>Salaberry-de-Valleyfield/Beauharnois/Huntingdon/Soulanges</u><br><b>Ambulance CETAM :</b> | (450) 377-2933      |
| <u>Island of Montreal – West and Surrounding Area</u><br><b>Ambulances CETAM :</b>           | (514) 597-2725      |
| <b>Urgences-Santé (Emergencies):</b>   | 9-1-1               |
| <b>Urgences-Santé :</b>  | (514) 723-5600      |

**2.6 REGIONAL MUNICIPALITIES (MRC) AND URBAN COMMUNITIES**

| <u>MRC OR URBAN COMMUNITIES</u>   | <u>MUNICIPALITIES CONCERNED</u>  | <u>PHONE AND FAX NUMBERS</u>                   |
|---|--|--|
| <b>Beauharnois-Salaberry</b><br>600, Ellice Str., Office 300<br>Beauharnois             | Melocheville, Beauharnois, Maple Grove   | Phone : (450) 225-0870<br>Fax : (450) 225-0872 |
| <b>Deux-Montagnes</b><br>400, Deux-Montagnes Blvd.,<br>Office 201<br>Deux-Montagnes     | Oka, Pointe-Calumet, Sainte-Marthe-sur-le-Lac, Deux-Montagnes  | Phone : (450) 491-1818<br>Fax : (450) 491-3040 |
| <b>Laval</b><br>1, Souvenir Sq.<br>Laval  | Laval  | Phone : (450) 978-3951<br>Fax : (450) 978-3966 |
| <b>Montreal Urban Community</b><br>1550, Metcalfe Str.,<br>Office 1400<br>Montreal      | L'Île-Bizard, Pierrefonds, Sainte-Geneviève, Senneville, Ste-Anne-de-Bellevue, Baie d'Urfé, Beaconsfield   | Phone : (514) 280-3450<br>Fax : (514) 280-3594 |
| <b>Vaudreuil-Soulanges</b><br>420, Saint-Charles Av.,<br>Office 200<br>Vaudreuil-Dorion | Vaudreuil-Dorion, Vaudreuil-sur-le-Lac, l'île-Cadieux, Pointe-des-Cascades, Terrasse-Vaudreuil, Pincourt, L'île-Perrot, Notre-Dame-de-l'île-Perrot | Phone : (450) 455-5753<br>Fax : (450) 455-0145 |

**2.7 MUNICIPALITIES**

NOTE : For the majority of the following municipalities, the 9-1-1 can be dialed in case of emergency.

**NORTH BANK OF LAC DES DEUX-MONTAGNES**

| <u>MUNICIPALITIES</u>                               | <u>PHONE NUMBER</u> | <u>FAX NUMBER</u> |
|---|---------------------|-------------------|
| <b>Deux-Montagnes</b>                               |                     |                   |
| Town Hall – 803, Oka Rd. :                          | (450) 473-2796      | (450) 473-3412    |
| Police :  | (450) 473-4686      |                   |
| Fire Department :                                   | (450) 473-4686      |                   |
| Emergency plan :                                    | (450) 473-2796      |                   |
| <b>Oka</b>  |                     |                   |
| Town Hall – 2017, Oka Rd. :                         | (450) 479-8333      | (450) 479-6869    |
| Police (Sécurité du Québec) :                       | (450) 472-1313      |                   |
| Fire Department (Intermunicipal) :                  | (450) 479-8383      |                   |
| Emergency plan :                                    | (450) 479-8333      |                   |
| <b>Pointe-Calumet</b>                               |                     |                   |
| Town Hall – 300, Basile-Routhier Av. :              | (450) 473-5930      | (450) 473-6571    |
| Police (Regional – Deux-Montagnes) :                | (450) 473-4686      |                   |
| Fire Department :                                   | (450) 472-8000      |                   |
| Emergency plan :                                    | (450) 472-8000      |                   |
| <b>Sainte-Marthe-sur-le-Lac</b>                     |                     |                   |
| Town Hall – 3000, Oka Rd. :                         | (450) 472-7310      | (450) 472-4283    |
| Police (Regional – Deux-Montagnes) :                | (450) 473-4686      |                   |
| Fire Department (Intermunicipal – Deux-Montagnes) : | (450) 473-4686      |                   |
| Emergency plan :                                    | (450) 472-7310      |                   |



**SOUTH BANK OF LAC DES DEUX-MONTAGNES & DES PRAIRIES RIVER**

| <u>MUNICIPALITIES</u>                      | <u>PHONE NUMBER</u> | <u>FAX NUMBER</u> |
|--|---------------------|-------------------|
| <b>Laval</b>                               |                     |                   |
| Town Hall – 1, Souvenir Sq. :              | (450) 978-8000      | (450) 978-5943    |
| Police & Fire Department (Emergencies) :   | (450) 662-4406      |                   |
| Emergency plan :                           | (450) 662-7284      |                   |
| <b>L'Île-Bizard</b>                        |                     |                   |
| Town Hall – 350, de l'Église Str. :        | (514) 620-6331      | (514) 620-2189    |
| Police (Pierrefonds-Île-Bizard) :          | (514) 280-0102      |                   |
| Fire Department (Pierrefonds-Île-Bizard) : | (514) 624-1124      |                   |
| Emergency plan :                           | (514) 620-6331      |                   |
| <b>L'île-Cadioux</b>                       |                     |                   |
| Town Hall – 50, Île Rd. :                  | (450) 424-4273      | (450) 424-6327    |
| Police (Sûreté du Québec) :                | 9-1-1               |                   |
| Fire Department :                          | 9-1-1               |                   |
| <b>Pierrefonds</b>                         |                     |                   |
| Town Hall – 13 665, Pierrefonds Blvd. :    | (514) 624-1124      | (514) 624-1300    |
| Police (MUC) :                             | (514) 280-4636      |                   |
| Fire Department :                          | (514) 624-1462      |                   |
| Emergency plan :                           | (514) 624-1402      |                   |
| Emergencies (24 hrs) :                     | (514) 624-1124      |                   |
| <b>Sainte-Geneviève</b>                    |                     |                   |
| Town Hall – 13, Chauret Str. :             | (514) 626-2535      | (514) 626-0312    |
| Police (MUC) :                             | (514) 280-2222      |                   |
| Fire Department :                          | (514) 626-2535      |                   |
| Emergency plan :                           | (514) 626-2535      |                   |
| <b>Senneville</b>                          |                     |                   |
| Town Hall – 35, Senneville Rd. :           | (514) 457-6020      | (514) 457-0447    |
| Police (MUC) :                             | (514) 280-2222      |                   |
| Fire Department :                          | (514) 457-6020      |                   |
| Emergency plan :                           | (514) 457-6020      |                   |
| <b>Vaudreuil-Dorion</b>                    |                     |                   |
| Town Hall - 2555, Dutrisac Str. :          | (450) 455-3371      | (450) 424-8540    |
| Police :                                   | 9-1-1               |                   |
| Fire Department :                          | (450) 455-7970      |                   |
| Emergency plan :                           | (450) 455-3371      |                   |
| <b>Vaudreuil-sur-le-Lac</b>                |                     |                   |
| Town Hall – 44, de l'Église Str. :         | (450) 455-1133      | (450) 455-8614    |
| Police (Sûreté du Québec) :                | 9-1-1               |                   |
| Fire Department :                          | 9-1-1               |                   |
| Emergency plan :                           | (450) 455-1133      |                   |

**VAUDREUIL BAY – OUTAOUAIS RIVER – ST-LAWRENCE RIVER – SAINT-LOUIS LAKE**

| <u>MUNICIPALITIES</u>                 | <u>PHONE NUMBER</u> | <u>FAX NUMBER</u> |
|---------------------------------------|---------------------|-------------------|
| <b>Baie D'Urfé</b>                    |                     |                   |
| Town Hall – 20 410, Lakeshore Rd. :   | (514) 457-5324      | (514) 457-5671    |
| Police (MUC) :                        | (514) 280-0101      |                   |
| Fire Department :                     | 9-1-1               |                   |
| Emergency plan :                      | (514) 457-5324      |                   |
| <b>Beaconsfield</b>                   |                     |                   |
| Town Hall – 303, Beaconsfield Blvd. : | (514) 428-4400      | (514) 428-4424    |
| Police :                              | (514) 280-0101      |                   |
| Fire Department :                     | (514) 630-1234      |                   |
| Emergency plan :                      | (514) 428-4410      |                   |
| Public security                       |                     |                   |
| Weekdays :                            | (514) 428-4400      |                   |
| Nights and weekends:                  | (514) 630-1234      |                   |
| <b>Beauharnois</b>                    |                     |                   |
| Town Hall – 600, Ellice Str. :        | (450) 429-3546      | (450) 429-6663    |
| Police :                              | (450) 373-3131      |                   |
| Fire Department :                     | (450) 429-7831      |                   |
| Emergency plan :                      | (450) 429-3546      |                   |
| <b>L'île-Perrot</b>                   |                     |                   |
| Town Hall – 110, Perrot Blvd. :       | (514) 453-1751      | (514) 453-2432    |
| Police :                              | (514) 453-2262      |                   |
| Fire Department :                     | (514) 453-2262      |                   |
| Emergency plan :                      | (514) 453-1751      |                   |
| <b>Maple Grove</b>                    |                     |                   |
| Town Hall – 149, Saint-Laurent Str. : | (450) 225-5061      | (450) 429-6540    |
| Police (Sûreté du Québec) :           | 1-800-461-2131      |                   |
| Fire Department :                     | (450) 225-2525      |                   |
| Emergency plan :                      | (450) 429-5143      |                   |
| <b>Melocheville</b>                   |                     |                   |
| Town Hall – 380, Edgar-Hébert Blvd. : | (450) 429-6426      | (450) 429-2346    |
| Police :                              | (450) 373-3131      |                   |
| Fire Department :                     | (450) 225-3333      |                   |
| Emergency plan :                      | (450) 429-6426      |                   |
| <b>Notre-Dame-de-l'Île-Perrot</b>     |                     |                   |
| Town Hall – 21, de l'Église Str. :    | (514) 453-4128      | (514) 453-8961    |
| Police :                              | (514) 453-2262      |                   |
| Fire Department :                     | (514) 453-2262      |                   |
| Emergency plan :                      | (514) 453-4128      |                   |

**VAUDREUIL BAY – OUTAOUAIS RIVER – ST-LAWRENCE RIVER – SAINT-LOUIS LAKE**

| <u>MUNICIPALITIES</u>                   | <u>PHONE NUMBER</u> | <u>FAX NUMBER</u> |
|---|---------------------|-------------------|
| <b>Pincourt</b>                         |                     |                   |
| Town Hall – 919, Duhamel Rd. :          | (514) 453-8981      | (514) 453-0934    |
| Police :                                | (514) 453-4188      |                   |
| Fire Department :                       | (514) 453-4188      |                   |
| Emergency plan :                        | (514) 453-8981      |                   |
| <b>Pointe-des-Cascades</b>              |                     |                   |
| Town Hall – 105, du Fleuve Rd. :        | (450) 455-3414      | (450) 455-9671    |
| Police (Sûreté du Québec) :             | (450) 310-4141      |                   |
| Fire Department :                       | (450) 455-3716      |                   |
| Emergency plan :                        | (450) 455-6626      |                   |
| <b>Sainte-Anne-de-Bellevue</b>          |                     |                   |
| Town Hall – 109, Sainte-Anne Str. :     | (514) 457-5500      | (514) 457-6087    |
| Police :                                | (514) 280-0801      |                   |
| Fire Department :                       | (514) 457-4236      |                   |
| Emergency plan :                        | (514) 457-5500      |                   |
| <b>Terrasse-Vaudreuil</b>               |                     |                   |
| Town Hall – 74, 7 <sup>e</sup> Avenue : | (514) 453-8120      | (514) 453-1180    |
| Police :                                | (514) 453-8345      |                   |
| Fire Department :                       | (514) 453-8345      |                   |
| Emergency plan :                        | (514) 453-8120      |                   |

**2.8 SENSITIVE AREAS**

**2.8.1 Water-intake points**

| <u>ID No</u><br>(1) | <u>PLACE</u>  | <u>PHONE NUMBER</u>   | <u>MUNICIPALITIES SERVED</u>   | <u>WATER RESERVE</u>   |
|---------------------|---|---|--|--|
| 1                   | <b>Oka municipality</b><br>380, Girouard Str.<br>Oka  | 24 hrs: (450) 479-6161<br>Cell.: (514) 949-2473                                 | Oka municipality   | Winter: 14 hrs<br>Summ.: 1-3 hrs                             |
| 4                   | <b>Oka parish &amp; park</b>  | MEF: (450) 479-8365<br>Park: (450) 479-8337<br>Cell.: (514) 949-2473            | Oka parish & park  | Winter: 24 hrs<br>Summer: 2 hrs                              |
| 16                  | <b>Régie intermunicipal de l'eau de Deux-Montagnes</b> (Deux-Montagnes Intermunicipal Water Board)<br>101, 26 <sup>e</sup> Avenue<br>Deux-Montagnes | 24 hrs: (450) 473-4502<br>Pag.: (514) 997-5315                                  | Deux-Montagnes,<br>Sainte-Marthe-sur-le-Lac, Pointe-Calumet,<br>St-Joseph  | 2-4 hrs  |
| 21                  | <b>Société nationale immobilière Sonatine Inc.</b><br>(Mobiles home park)   | (514) 695-4640  |  |  |
| 23                  | <b>Pierrefonds municipality</b><br>18025, Gouin West<br>Pierrefonds   | Plant (24hrs):<br>(514) 624-1080<br>or municipality (24 hrs):<br>(514) 624-1124 | Pierrefonds, Dollard-des-Ormeaux,<br>Roxboro, Île-Bizard,<br>Ste-Geneviève | 4-8 hrs<br>Could connect<br>with Pointe-Claire and<br>Dorval |
| 34                  | <b>Senneville municipality</b><br>52, Senneville Rd.  | 24 hrs: (514) 633-2275  | Senneville   | 16 hrs   |

(1) See maps in Attachment No.1

**2.8.1 Water-intake points**

| <u>ID No</u><br>(1) | <u>PLACE</u>  | <u>PHONES NUMBER</u>  | <u>MUNICIPALITIES SERVED</u>                                | <u>WATER RESERVE</u>  |
|---------------------|---|---|---|---|
| 35                  | <b>Sainte-Anne-de-Bellevue municipality</b><br>209, St-Anne Rd.<br>Ste-Anne-de-Bellevue                                   | Plant (24 hrs):<br><b>(514) 457-5538</b> or<br><b>(514) 457-3354</b>    | Ste-Anne-de-Bellevue, Senneville                            | 4-5 hrs<br>Could connect with Pointe-Claire (water reserve of 24 hrs) |
| 38                  | <b>McDonald College</b><br>21300, Lakeshore Blvd.<br>Sainte-Anne-de-Bellevue  | 24 hrs: <b>(514) 894-3846</b><br>or plant :<br><b>(514) 398-7538</b>    | McDonald College<br>Campus & John<br>Abbott College         | 12-16 hrs   |
| 46                  | <b>Ile-Perrot municipality</b><br>251, Montée Sagala<br>Ile-Perrot  | 24 hrs:<br><b>(514) 453-1751(240)</b><br>or <b>(514) 453-1751 (241)</b> | Ile-Perrot<br>municipality                                  | 2 hrs<br>Could connect with Régie de l'eau de l'Ile-Perrot            |
| 57                  | <b>Régie de l'eau de l'Ile-Perrot</b><br>(Ile-Perrot Water Board)<br>1244, Ile Perrot Blvd.<br>Notre-Dame-de-l'Île-Perrot | 24 hrs: <b>(514) 425-2246</b><br>Plant: <b>(514) 425-2244</b>           | Notre-Dame-de-l'île-Perrot, Pincourt,<br>Terrasse-Vaudreuil | 2-5 hrs   |
| 69                  | <b>Vaudreuil-Dorion municipality</b><br>2530, Paul-Gérin-Lajoie Rd.<br>Vaudreuil-Dorion                                   | Plant (24 hrs):<br><b>(450) 424-7804</b><br>or <b>(450) 424-7801</b>    | Vaudreuil-Dorion,<br>Vaudreuil-sur-le-Lac,<br>L'île-Cadieux | 20-24 hrs   |

(1) See maps in Attachment No.1.

**2.8.2 Nautical activities**

| <b>ID No</b> | <b>DESCRIPTION</b>   | <b>PHONE NUMBER</b>                                     |
|--------------|--|---|
| (1)          |  |   |
| 2            | <b>Oka Marina</b><br>257, des Anges Avenue<br>Oka  | (450) 479-8203  |
| 5            | <b>Oka Park</b><br>(beach, nautical activities, camping)   | (450) 479-8337 or (450) 479-8365                        |
| 6            | <b>Pointe-Calumet Marina</b><br>1305, Proulx Blvd.<br>Pointe-Calumet   | (450) 623-6525  |
| 7            | <b>Public boat launch</b><br>René Sq.<br>Pointe-Calumet  | Pointe-Calumet municipality<br>(450) 473—5930           |
| 9            | <b>École de voile Sansoucy</b><br>(Sansoucy Sailing School)<br>150, 27 <sup>e</sup> Avenue<br>Pointe-Calumet | (450) 472-8042  |
| 10           | <b>Auberge du Lac Marina</b><br>341, Lachapelle Blvd.<br>Pointe-Calumet                                      | (450) 472-2920  |
| 11           | <b>Public boat launch</b><br>45 <sup>e</sup> Avenue<br>Sainte-Marthe-sur-le-Lac                              | Sainte-Marthe-sur-le-Lac municipality<br>(450) 623-5798 |
| 12           | <b>Municipal beach</b><br>Sainte-Marthe-sur-le-Lac   | Sainte-Marthe-sur-le-Lac municipality<br>(450) 623-5798 |
| 13           | <b>Marina Plage Roger (boat launch and beach)</b><br>2, Roger Str.<br>Sainte-Marthe-sur-le-Lac               | (450) 473-0160  |
| 14           | <b>Public boat launch</b><br>30 <sup>e</sup> Avenue<br>Sainte-Marthe-sur-le-Lac                              | Sainte-Marthe-sur-le-Lac municipality<br>(450) 623-5798 |
| 15           | <b>Public boat launch</b><br>18 <sup>e</sup> Avenue<br>Sainte-Marthe-sur-le-Lac                              | Sainte-Marthe-sur-le-Lac municipality<br>(450) 623-5798 |
| 17           | <b>Public boat launch</b><br>26 <sup>e</sup> Avenue<br>Deux-Montagnes  | Deux-Montagnes municipality<br>(450) 473-2796           |

(1) See maps in Attachment No.1.

**2.8.2 Nautical activities**

| <b>ID No</b> | <b>DESCRIPTION</b>   | <b>PHONE NUMBER</b>   |
|--------------|--|---|
| <b>(1)</b>   |  |   |
| <b>18</b>    | <b>Dupuis Marine</b><br>1460, Bord de l'eau Str.<br>Laval  | <b>(450) 689-4232</b>   |
| <b>19</b>    | <b>Quay &amp; Boat launch</b><br>Pointe-aux-Carrières<br>L'Île-Bizard  | Montreal Urban Community<br><b>(514) 280-8708</b><br>cell.: <b>(514) 943-3942</b> |
| <b>20</b>    | <b>Parc-nature du Bois-de-l'Île-Bizard</b><br>(beach)  | Montreal Urban Community<br><b>(514) 280-6784</b>                                 |
| <b>22</b>    | <b>Public boat launch (Theoret Beach)</b><br>850, Cherrier Str.<br>L'Île-Bizard                                    | Île-Bizard municipality<br><b>(514) 620-6331</b>                                  |
| <b>24</b>    | <b>Public boat launch</b><br>(at the entrance of the Parc régional du<br>Cap Saint-Jacques)<br>Pierrefonds         | Montreal Urban Community<br><b>(514) 280-6723</b>                                 |
| <b>25</b>    | <b>Nautical activities and beach</b><br>Parc-nature du Cap-Saint-Jacques   | Montreal Urban Community<br><b>(514) 280-6784</b>                                 |
| <b>26</b>    | <b>Public boat launch</b><br>Parc-nature de l'Anse à l'Orme  | Montreal Urban Community<br><b>(514) 280-6723</b>                                 |
| <b>28</b>    | <b>Senneville Yacht Club</b><br>104, Chemin Senneville<br>Senneville   | <b>(514) 457-9943</b>   |
| <b>29</b>    | <b>Beaconsfield Yacht Club</b><br>260, Beaconsfield Blvd.<br>Beaconsfield  | <b>(514) 695-1272</b>   |
| <b>31</b>    | <b>Club Nautique de Deux-Montagnes Inc.</b><br>(quay and boat launch)<br>30, des Rigolets Str.<br>Vaudreuil-Dorion | <b>(450) 455-5370</b>   |
| <b>33</b>    | <b>Public boat launch</b><br>Senneville Rd.<br>Senneville  | Senneville municipality<br><b>(514) 457-6020</b>                                  |

(1) See maps in Attachment No.1.

**2.8.2 Nautical activities**

| <b>ID No</b> | <b>DESCRIPTION</b>   | <b>PHONE NUMBER</b>   |
|--------------|--|---|
| (1)          |  |   |
| 36           | <b>Public boat launch</b><br>Parc Godin<br>Sainte-Anne/Pacifique Str.<br>Sainte-Anne-de-Bellevue | Sainte-Anne-de-Bellevue municipality<br><b>(514) 457-8739</b> |
| 37           | <b>Public boat launch</b><br>109, Sainte-Anne Str.<br>Sainte-Anne-de-Bellevue                    | Sainte-Anne-de-Bellevue municipality<br><b>(514) 457-8739</b> |
| 39           | <b>Baie D'Urfé Yacht Club</b><br>20 650, Lakeshore Rd.<br>Baie D'Urfé                            | <b>(514) 457-3382</b>   |
| 40           | <b>Boating Club</b><br>20 438, Lakeshore Rd.<br>Baie d'Urfé                                      | <b>(514) 630-3808</b>   |
| 41           | <b>Lakeshore Outlet Boat launch</b><br>Beaconsfield  | Beaconsfield municipality<br><b>(514) 428-4410</b>            |
| 42           | <b>Angell Bay boat launch</b><br>Beaconsfield  | Beaconsfield municipality<br><b>(514) 428-4410</b>            |
| 43           | <b>Saint-Louis Outlet boat launch</b><br>Beaconsfield  | Beaconsfield municipality<br><b>(514) 428-4410</b>            |
| 44           | <b>Allard Marina</b><br>115, Montée Sagala<br>L'Ile-Perrot                                       | <b>(514) 453-2403</b>   |
| 45           | <b>Public boat launch</b><br>255, Montée Sagala<br>L'Ile-Perrot                                  | L'Ile-Perrot municipality<br><b>(514) 453-1751 (258)</b>      |
| 47           | <b>Georges Proulx Marina</b><br>3, 34 <sup>e</sup> Avenue<br>L'Ile-Perrot                        | <b>(450) 455-3674</b>   |
| 48           | <b>Federal quay &amp; boat launch</b><br>34 <sup>e</sup> Avenue<br>L'Ile-Perrot                  | L'Ile-Perrot municipality<br><b>(514) 453-1751 (258)</b>      |
| 49           | <b>Ile Perrot Marina</b><br>1090, Ile Perrot Blvd.<br>Notre-Dame-de-l'île-Perrot                 | <b>(514) 457-4341</b>   |

(1) See maps in Attachment No.1.



**2.8.2 Nautical activities**

| <b><u>ID No</u></b><br><b>(1)</b> | <b><u>DESCRIPTION</u></b>  | <b><u>PHONE NUMBER</u></b>   |
|-----------------------------------|--|--|
| 50                                | <b>Ile Perrot Yacht Club</b><br>1248, Ile Perrot Blvd.<br>Notre-Dame-de-l'île-Perrot                                     | <b>(514) 453-3320</b>  |
| 51                                | <b>Sugar Bay Trailer Park</b><br>Boat launch<br>1288, Ile Perrot Blvd.<br>Notre-Dame-de-l'île-Perrot                     | <b>(514) 453-2725</b>  |
| 55                                | <b>Federal quay</b><br>Auclair/Eglise Str.<br>Notre-Dame-de-l'Île-Perrot   | Fisheries & Oceans Canada<br><b>(418) 648-5507</b>                         |
| 56                                | <b>Public boat launch</b><br>Auclair/Augus Broissoit Str.<br>Notre-Dame-de-l'Île-Perrot                                  | Notre-Dame-de-l'Île-Perrot municipality<br><b>(514) 453-4128</b>           |
| 58                                | <b>Base de plein-air Notre-Dame-de-Fatima</b><br>Recreation Camp<br>2464, Ile Perrot Blvd.<br>Notre-Dame-de-l'Île-Perrot | <b>(514) 453-7600</b>  |
| 61                                | <b>Public boat launch</b><br>Parc Ambrosio<br>Cardinal Léger/Duhamel Str.<br>Pincourt                                    | Pincourt municipality<br><b>(514) 453-8988</b>                             |
| 62                                | <b>Public boat launch</b><br>Duhamel Str./22 <sup>e</sup> Avenue<br>Pincourt   | Pincourt municipality<br><b>(514) 453-8988</b>                             |
| 63                                | <b>Public beach</b><br>Duhamel/Monseigneur Str.<br>Pincourt  | Pincourt municipality<br><b>(514) 453-8988</b>                             |
| 64                                | <b>Public boat launch</b><br>Bellevue de Pincourt Park<br>Bellevue/Duhamel Str.<br>Pincourt                              | Pincourt municipality<br><b>(514) 453-8988</b>                             |
| 65                                | <b>Public boat launch</b><br>19, 1 <sup>e</sup> Boulevard<br>Terrasse-Vaudreuil  | Terrasse-Vaudreuil municipality<br><b>(514) 453-8120 or (514) 453-2056</b> |

(1) See maps in Attachment No.1.

**2.8.2 Nautical activities**

| <u>ID No</u> | <u>DESCRIPTION</u>  | <u>PHONE NUMBER</u>   |
|--------------|---|---|
| (1)          |   |   |
| 66           | <b>Public beach</b><br>1 <sup>e</sup> Blvd.<br>Terrasse-Vaudreuil         | Terrasse-Vaudreuil municipality<br><b>(514) 453-8120</b> or <b>(514) 453-2056</b> |
| 68           | <b>Boat launch</b><br>Les Chenaux Str.<br>Vaudreuil-Dorion                | <b>(514) 866-3501</b>   |
| 71           | <b>Théâtre des Cascades Marina</b><br>2, Canal Rd.<br>Pointe-des-Cascades | <b>(450) 455-8855</b>   |
| 73           | <b>Public boat launch</b><br>Pointe-des-Cascades                          | Pointe-des-Cascades municipality<br><b>(450) 455-3414</b>                         |
| 75           | <b>Public boat launch</b><br>Melocheville                                 | Melocheville municipality<br><b>(450) 225-3333</b>                                |
| 76           | <b>Public boat launch</b><br>25 <sup>e</sup> Avenue<br>Melocheville       | Melocheville municipality<br><b>(450) 225-3333</b>                                |
| 77           | <b>Melocheville Marina</b><br>2, Bourcier Blvd.<br>Melocheville           | <b>(450) 429-5937</b> or <b>(450) 429-4378</b>                                    |
| 78           | <b>Public boat launch</b><br>Des Pins Str.<br>Maple Grove                 | Maple Grove municipality<br><b>(450) 429-5143</b>                                 |

(1) See maps in Attachment No.1.

**2.8.3 Herbarium, fishes and birds**

| <b>ID No</b> | <b>DESCRIPTION</b>   | <b>PHONE NUMBER</b>   |
|--------------|--|---|
| (1)          |  |   |
| 3            | <b>Aquatic herbarium</b><br>opposite of Pointe-aux-Bleuets<br>(east side of Baie d'Oka)      | MEF - Regional Office-Laurentides<br><b>(450) 623-7811</b>  |
| 8            | <b>Aquatic herbarium</b><br>(opposite of Pointe-Calumet)                                     | MEF - Regional Office-Laurentides<br><b>(450) 623-7811</b>  |
| 27           | <b>Aquatic and riparian herbarium</b><br>Anse à l'Orme                                       | MEF - Regional Office – Montreal<br><b>(514) 873-3636</b>   |
| 30           | <b>Aquatic herbarium</b><br>Baie de l'Île-Cadieux  | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 32           | <b>Aquatic herbarium</b><br>Anse de Vaudreuil  | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 52           | <b>Spawning zone</b><br>Grande Anse  | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 53           | <b>Spawning zone</b><br>(between Pointe-du-Moulin and Pointe<br>à Fourneau)                  | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 54           | <b>Spawning zone</b><br>(south-east of Ile-Perrot)   | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 59           | <b>Riparian and aquatic herbarium</b><br>Anse au Sable                                       | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 60           | <b>Spawning zone</b><br>Anse au Sable  | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 67           | <b>Important area of herbarium, swamps,<br/>spawning</b><br>(opposite of Terrasse-Vaudreuil) | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 70           | <b>Riparian and aquatic herbarium</b><br>(opposite of Pointe-au-Renard)                      | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 72           | <b>Spawning zone</b><br>(west of Pointe-des-Cascades)  | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 74           | <b>Spawning zone</b><br>(between Pointe du Buisson and<br>Melocheville)                      | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 79           | <b>Riparian and aquatic herbarium</b><br>(around Îles de la Paix)                            | MEF - Regional Office – Montérégie<br><b>(450) 928-7607</b> |
| 80           | <b>Migratory Birds Refuge and Îles de la<br/>Paix National Wildlife Area</b>                 | Canadian Wildlife Service<br><b>(418) 648-2544</b>          |

(1) See maps in Attachment No. 1.

NOTE : After office hours, the emergency phone number for MEF is: **(514) 873-3454**

**2.9 CONTRACTORS**

| <u>CONTRACTORS</u>                               | <u>PHONE NUMBER</u>          |
|--|------------------------------|
| SIMEC, Verchères                                 | 24 hrs: (613) 930-9690       |
| Sani-Mobile, Anjou                               | 24 hrs: (514) 351-7264       |
| Urgence Marine Inc., Montréal                    | 24 hrs: (514) 640-3138       |
| Les Entreprises Philip Inc., Pointe-aux-Trembles | 24 hrs: (514) 645-1621 (256) |

**2.10 ACCOMMODATIONS/MEETING ROOMS**

| <u>ACCOMMODATION</u>   | <u>PHONE NUMBER</u> |
|--|---------------------|
| <b>L'Auberge Saint-Eustache</b><br>40, du Bois Str.<br>Saint-Eustache (Québec)<br>(39 rooms ; 2 meeting rooms)                     | (450) 473-6825      |
| <b>Holiday Inn Pointe-Claire</b><br>6700, Trans-Canadienne High.<br>Pointe-Claire (Québec)<br>(307 rooms, 13 meeting rooms)        | (514) 697-7110      |
| <b>Quality Suite Pointe-Claire</b><br>6300, Transcanadienne High.<br>Pointe-Claire (Québec)<br>(162 rooms ; 2 meeting rooms)       | (514) 426-5060      |
| <b>Quality Suites</b><br>6300, Trans-Canadienne High.<br>Pointe-Claire (Québec)<br>(162 rooms ; 2 meeting rooms)                   | (514) 426-5060      |
| <b>Château Vaudreuil Suites Hôtel</b><br>21700, Trans-Canadienne High.<br>Vaudreuil-Dorion (Québec)<br>(117 rooms ; meeting rooms) | (450) 455-0955      |
| <b>Hôtel Chateaufneuf Laval</b><br>3655, des Laurentides High.<br>Laval (Québec)<br>(68 rooms, 5 meeting rooms)                    | (450) 681-9000      |
| <b>Hôtel President Laval</b><br>2225, des Laurentides High.<br>Laval (Québec)<br>(174 rooms, 4 meeting rooms)                      | (450) 682-2225      |

### 3.0 RESPONSE IN CASE OF A REFINED PETROLEUM PRODUCTS SPILL - DEUX-MONTAGNES LAKE SECTION

#### 3.1 DISCOVERY AND ALERT

Contrary to a ground spill, a refined product spill in a water evolves quickly. Sensitive resources, such as drinking water, may be affected before anyone can reach the site to assess the spill extent or even confirm that it is indeed a hydrocarbons leak. It is therefore imperative to take preventive measures as soon as the leak is discovered. The purpose of the proposed measures (see the table on the following page) is to enable a quick and efficient response, while taking into account the existing response structures.

#### 3.2 SETTING UP A COMMAND CENTER

When a refined product spill into the Deux-Montagnes Lake is discovered, it is important to set up a response coordination center as quickly as possible. This center enables the involved organizations (TNPI, municipalities, provincial and federal departments, or others depending on the situation) to exchange information and plan their response according to the available resources and concerns of each party. This center must be set up as close as possible to the site of the operations for an easier and more efficient information exchange.

As a leak is confirmed, the meeting point for all interveners, and so the first command center, should be the TNPI's **Como Station** located on de l'Anse Rd. at Vaudreuil-Dorion. Also, TNPI owns a mobile emergency unit based in Lancaster (Ontario) (1.5 hrs from Montreal) that could be used as an advanced command center (thus downstream of the pipeline).

TNPI would also activate the Crisis Command Center in the Richmond Hill Head Office to provide direction to all TNPI resources and provide support to the field command center.

In case of a major leak or depending on further needs, the center can be transferred afterwards to an hotel, a municipal center or another location in the area.

The following sequence establishes an order of priorities, in the first hours, according to the specific nature of a refined petroleum products spill into de Deux- Montagnes Lake.

|  |  |
|--|--|
| <p><b>1. Discovery of an hydrocarbons leak at or near Deux-Montagnes Lake.</b></p>   | <ul style="list-style-type: none"> <li>➤ Line balance alarm</li> <li>➤ Pressure drop in pipeline</li> <li>➤ Observation by aerial patrol</li> <li>➤ Observation by a third party</li> </ul>  |
| <p><b>2. Stop pumping activities.</b></p>  | <ul style="list-style-type: none"> <li>➤ As soon as a leak is suspected, the controller must isolate the section by closing the valve at the TNPI's Como station and Oka Park.</li> </ul>  |
| <p><b>3. Activate initial alert.</b></p>   | <ul style="list-style-type: none"> <li>➤ Mobilization of the company's resources</li> </ul>  |
| <p><b>4. Send TNPI team on site.</b></p>   | <ul style="list-style-type: none"> <li>➤ The maintenance team evaluates the extent of the leak and begins application of containment measures.</li> </ul>  |
| <p><b>5. Notify a contractor who specializes in the confinement and recovery of hydrocarbons on water (e.g. SIMEC) as well as the other subcontractors already identified in Section 2.9 to provide assistance in case of emergency.</b></p> | <ul style="list-style-type: none"> <li>➤ The contractor and other subcontractors can take some steps while waiting for confirmation of the spill and a description of the situation.</li> </ul>  |
| <p><b>6. Call fire departments in Vaudreuil-Dorion (Tel.: 450-455-7970), Oka (Tel.:450-479-8383) and Pointe-Calumet (Tel.: 450-472-8000).</b></p>  | <ul style="list-style-type: none"> <li>➤ The fire departments can quickly send observers along the banks of Deux-Montagnes Lake to evaluate the situation and to determine if there is any hydrocarbon on the water. They must be notified as soon as a leak is discovered or suspected.</li> </ul>  |
| <p><b>7. Notify the Alert and Warning Network of the Coast Guard (Fisheries &amp; Oceans Canada) (Tel.: 1-800-363-4735).</b></p>   | <ul style="list-style-type: none"> <li>➤ Coast Guard notifies internal services (ex.: Marine Communication and Traffic Services, pollution-emergency, etc.), MEF and Environment Canada.</li> <li>➤ The Coast Guard can immediately issue a pollution warning for the area. This warning is broadcast via VHF radio to those in charge of marinas and to pleasure-craft owners. If necessary, Coast Guard can issue a traffic control warning in the area to minimize the number of boats contaminated by hydrocarbons and to facilitate the work of the confinement and recovery team.</li> </ul> |

|   |  |
|---|--|
| <p><b>8. Call the water treatment plants enumerated in Section 2.8.1 of the site specific response plan, to inform them of the possible presence, in the next hours, of hydrocarbons in water. Call first the nearest water treatment plants to the pipeline.</b></p> | <p>➤ Call the plant directly. If the plant operator or person in charge cannot be reached, ask the fire department of the municipality to inform them. This step is of a preventive nature. If there are hydrocarbons, plant operators can temporarily stop pumping activities and analyse the situation so as to avoid contaminating the drinking water distribution network in the municipalities it supplies.</p> |
| <p><b>9. Notify the Quebec Ministry of the Environment and Wildlife (during office hours notify the Regional Office (see Section 2.1), after office hours dial 514-873-3454) and Environment Canada (514-283-2333).</b></p>   | <p>➤ This is required by Section 21 of the Quebec Environment Quality Act and Section 38 of the Canadian Fisheries Act. Any leak must be reported as soon as possible. Depending on the size of the spill, these organizations may request assistance from other concerned parties.</p>  |
| <p><b>10. Notify the regional municipalities (MRC) and urban communities that could be affected by the leak (see Section 2.6).</b></p>  | <p>➤ The regional municipalities (MRC) and urban communities can inform each of their municipality that can be affected by the leak</p>  |
| <p><b>11. Notify nautical activities (Section 2.8.2 of the response plan) that could be affected by the leak. Call first the nearest nautical activities to the pipeline.</b></p>   |  |

### 3.3 HEALTH PROTECTION

#### 3.3.1 *Refined product in water*

Refined product contains numerous hydrocarbons, some of which are toxic to humans and may have explosive characteristics in air.

In order to minimize the danger for the population in the spill impacted area, certain measures must be implemented very rapidly upon discovery or reasonable suspicion of a refined product leak into the Deux-Montagnes Lake. These measures include:

- 1) request filed to the Fire Department of the municipalities affected by the spill to dispatch observers on the Deux-Montagnes Lake banks to identify the area showing presence of petroleum products;
- 2) notify the Alert and Warning Network of the Coast Guard which will inform MEF and Environment Canada and will issue a pollution and a traffic control warning for the area;
- 3) TNPI's on-site commander (or his/her replacement) must provide the technical data sheet of the spilled product to the relevant fire departments as soon as possible, either by fax or e-mail.

Should there be a significant refined product slick, it is important to assess the possible dangers for the riverside population and those on the water.

#### 3.3.2 *Gas fumes from refined product*

Though it is very difficult and frequently even impossible to precisely assess the toxicity level of hydrocarbons in the air, due to the complex behaviours of a spill of refined product and variations in environmental conditions, some criteria can be used to determine the preventive measures that need to be implemented.

On-site observers (such as fire fighters, police officers, etc.) must report the presence of any strong smell to the emergency measure coordinator of their municipality. Citizen complaints in this regard must also be noted.

If possible and safe, the fire fighters must also identify areas along banks where explosive fumes may be accumulating and measure their level of explosivity with the help of portable apparatus. If an area is identified as being at risk of an explosion, it must be evacuated immediately by the appropriate authorities (fire fighters, police officers) and kept under surveillance until such time as the situation returns to normal.

It is up to the officials in charge of municipal emergency measures to decide whether or not to evacuate an area because of the presence of toxic fumes and set up a security perimeter. However, these decisions must be made in consultation with TNPI's on-site commander (or his/her replacement), the representative of the *Direction régionale de la sécurité et de la prévention* (DGSP - Regional Safety and Prevention Directorate), as well as the Public Health representative.



### 3.4 ENVIRONMENTAL PROTECTION

In the event of a petroleum products spill into a lake or river, various government authorities in the field of environmental protection (MEF, Environment Canada) must be notified as soon as possible after the discovery of the leak. These organizations will participate in identifying which resources are threatened and will propose a set of priorities of protection, confinement, recovery and clean-up measures to be implemented, depending on available resources, environmental features in the area, time of the year, weather conditions and so on. The maps provided in Attachment No.1 show the primary sensitive features known in the area.

Furthermore, the hired contractor will be responsible for setting up temporary centers to store recovered residues and debris (including obtaining the necessary permits) until such time as they can be transported to a more long-term storage site or until permits involved for their recycling or disposal can be obtained.

### 3.5 POSSIBLE OPERATIONS SITES

Should there be a major event, Eastern Canada Response Corporation (SIMEC) is the general contractor hired by TNPI to direct confinement, recovery and clean-up operations on water and along shorelines. The company has a major response equipment storage site in Verchères, Québec. It has also contractual agreements with several specialized contractors in the area.

In the event of a minor spill, other contractors (see list in Section 2.9) can be hired to carry out recovery and clean-up operations under the supervision of TNPI personnel.

During a response operation, the contractor's director of operations will report directly to TNPI's on-site commander (or his/her replacement) so as to coordinate operations in line with priorities set by the command center.

The maps provided in Attachment No.1 identify some possible operations points that are described in the next page. However, appropriate operations points are specific to each spill case and depends notably on currents speed, wind speed and direction, spill extent, etc.

The operation sites identified would be selected as first lines of defense. Mobilization to upstream recovery of control points would not be authorized until it is certain that the resources required to provide containment at the first line of defense sites are on site.

**POSSIBLE OPERATIONS SITES**

| <b><u>POSSIBLE OPERATION SITES</u></b> | <b><u>LOCATION</u></b>  | <b><u>MEANS OF ACCESS</u></b>   | <b><u>CONFINEMENT WIDTH</u></b> |
|--|---|---|---------------------------------|
| <b>A</b>                               | Under the bridge on des Rigolets Str. (Vaudreuil-sur-le-Lac)              | Transcanadienne Rd. (Highway 40) - Roche Blvd. - des Rigolets Str.                                  | 60 meters (during spring)       |
| <b>B</b>                               | At the end of des Rigolets Str. (L'Ile-Cadieux)                           | Transcanadienne Rd. (Highway 40) - Roche Blvd. - des Rigolets Str.                                  | 150 meters                      |
| <b>C</b>                               | Between the L'Ile aux Tourtes Bridge and Ile Todd                         | Transcanadienne Rd. (Highway 40)  | 60 meters (during spring)       |
| <b>D</b>                               | Between Parc-nature du Cap-Saint-Jacques and Ile-Bizard                   | Gouin W. Blvd. - Parc-nature du Cap-Saint-Jacques   | 300 meters                      |
| <b>E</b>                               | Between Laval-sur-le-Lac and Ile-Bizard                                   | Chomedey Rd. (Highway 13) – Bord de l'eau Rd. – Les Érables Str. – Les Pins Str. (Laval-sur-le-Lac) | 225 meters                      |
| <b>F</b>                               | Under the railroad bridge which links Laval-sur-le-lac and Deux-Montagnes | Chomedey Rd. (Highway 13) – Bord de l'eau Rd. – Les Érables Str.                                    | 300 meters                      |

**ATTACHMENT NO. 1 : MAPS**

# Legend



Herbarium



Fishes



Birds



Recreation camp



Marinas, boating clubs, boat launches



Beach



Camping



Water-intake point



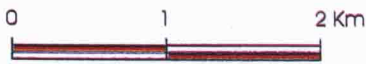
Particular area



Possible operation site

+1h

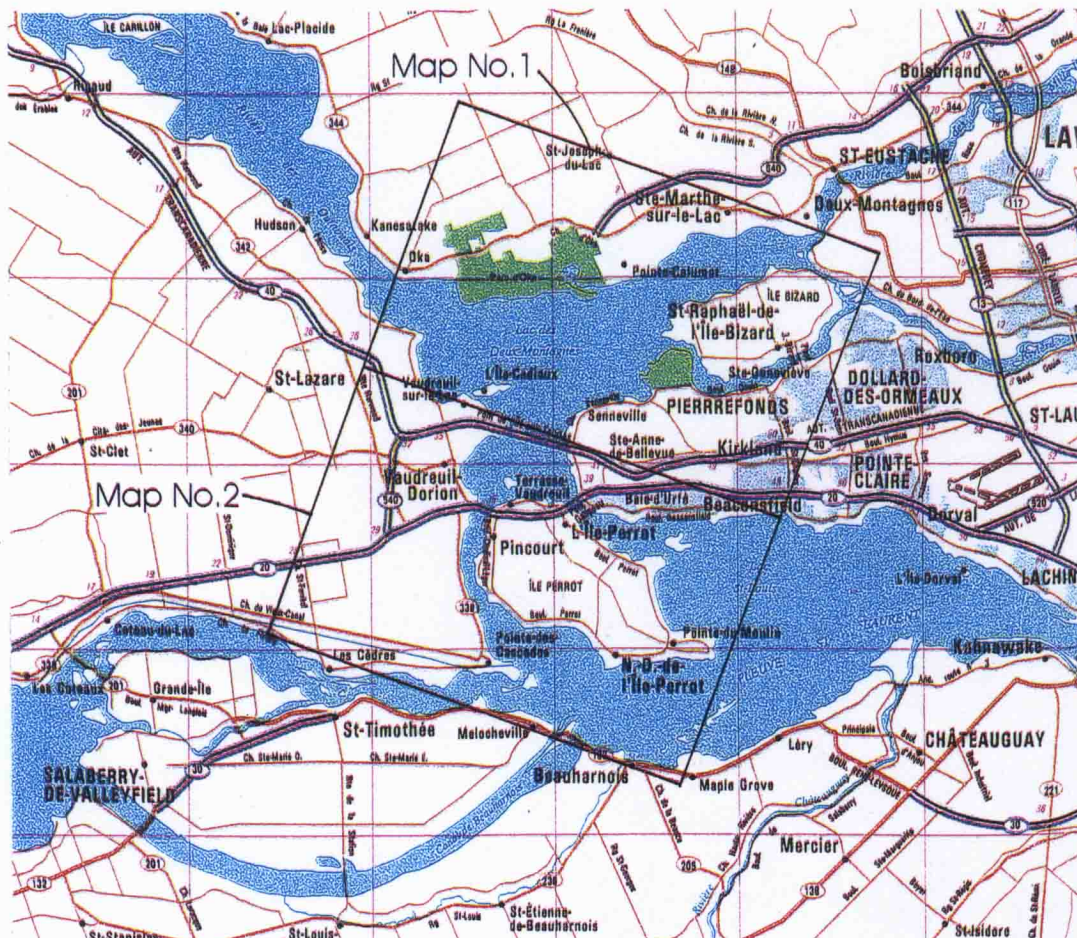
Drift time in hours from pipeline (according to current speed of 0.5 knot indicated in nautical charts for this area (Canadian Hydrographic Service))

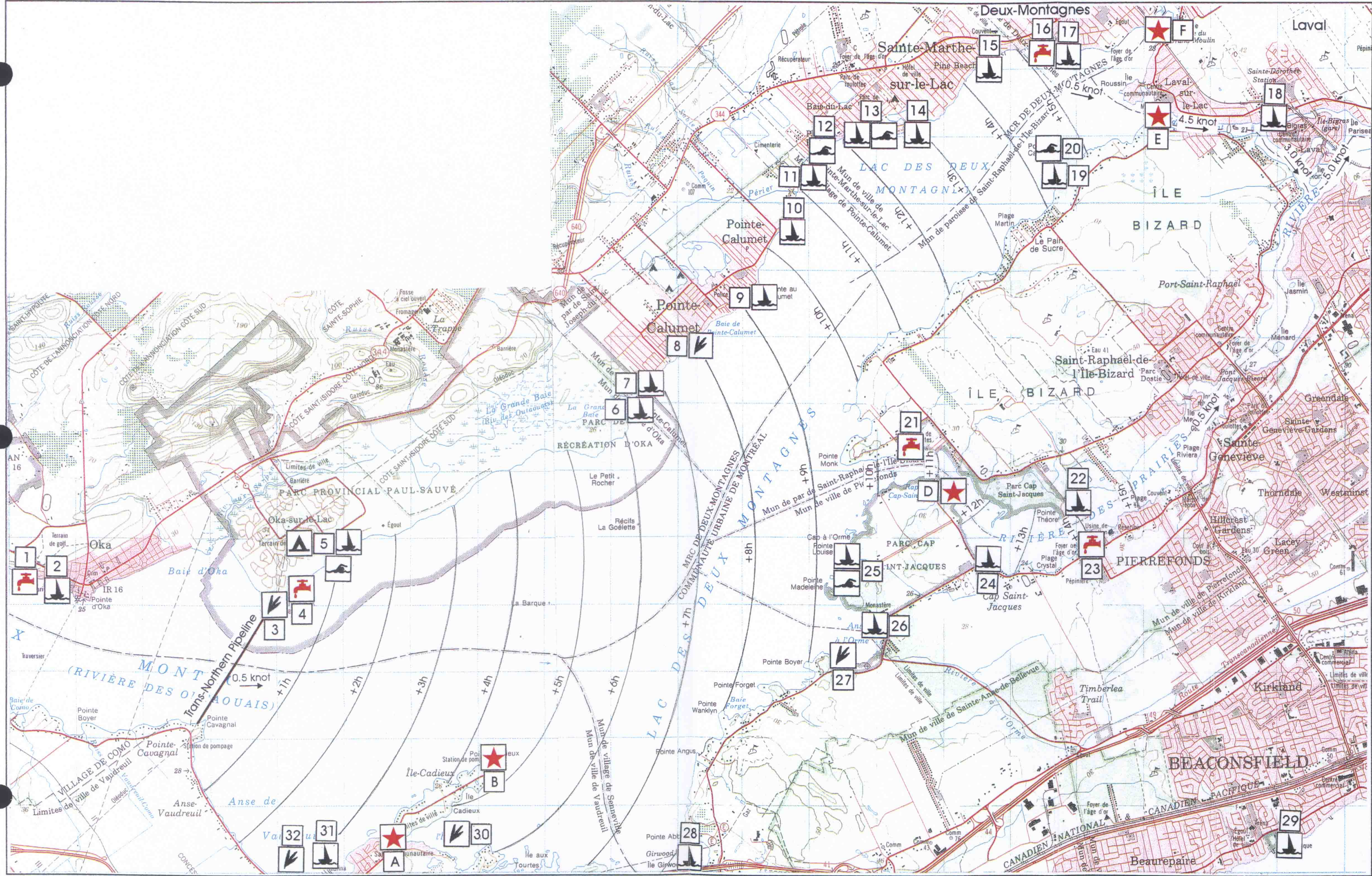


Scale 1 : 50 000  
Map No.1 and No.2

Source : Energy, Mines and Resources Canada, topographic map "Vaudreuil 31 G/8, Laval 31 H/12 and Lachine 31 H/5".

# Location Map





Map No. 1



**ATTACHMENT NO. 2 : WIND STATISTICS**

DIRECTION DES RESEAUX ATMOSPHERIQUES

STATISTIQUES SUR LES VENTS  
OBSERVATIONS A 08H ET 18H (1986)

STATION: 7025250 (8-6)  
PERIODE: 1977-1989  
NOM : MONTREAL-INTERNATIONAL-A  
SEQUENCE: 235050

ROSE DES VENTS  
FREQUENCE PAR DIRECTION

|           | NORD  | NE    | EST  | SE    | SUD   | SW    | WEST  | NW   | CALM | TOT |
|-----------|-------|-------|------|-------|-------|-------|-------|------|------|-----|
| JANVIER   | 13.65 | 10.17 | 3.85 | 8.44  | 4.59  | 26.09 | 25.68 | 2.98 | 4.59 | 806 |
| FEVRIER   | 9.54  | 12.40 | 3.41 | 7.08  | 6.40  | 26.43 | 24.66 | 3.81 | 6.27 | 734 |
| MARS      | 16.38 | 12.90 | 9.71 | 8.19  | 4.22  | 21.34 | 22.83 | 4.59 | 3.85 | 806 |
| AVRIL     | 16.03 | 15.90 | 6.67 | 9.87  | 7.31  | 15.00 | 19.62 | 7.82 | 1.78 | 780 |
| MAI       | 12.41 | 15.01 | 5.21 | 12.90 | 9.93  | 20.60 | 15.63 | 6.33 | 1.99 | 806 |
| JUIN      | 8.46  | 8.72  | 3.46 | 11.15 | 9.36  | 28.85 | 20.64 | 7.56 | 1.79 | 780 |
| JUILLET   | 8.68  | 4.47  | 1.12 | 10.42 | 12.16 | 30.77 | 20.97 | 8.31 | 2.11 | 806 |
| AOUT      | 11.79 | 6.95  | 4.84 | 10.55 | 10.92 | 27.67 | 18.98 | 6.20 | 2.11 | 806 |
| SEPTEMBRE | 12.31 | 8.08  | 5.51 | 13.59 | 7.56  | 21.03 | 20.51 | 7.44 | 3.97 | 806 |
| OCTOBRE   | 13.77 | 9.06  | 5.96 | 12.41 | 6.45  | 22.70 | 20.72 | 5.09 | 3.85 | 806 |
| NOVEMBRE  | 11.79 | 13.59 | 6.15 | 9.49  | 5.51  | 18.72 | 24.62 | 5.26 | 4.87 | 806 |
| DECEMBRE  | 14.76 | 10.79 | 5.21 | 8.19  | 4.22  | 21.46 | 24.32 | 5.83 | 5.21 | 806 |
| ANNUEL    | 12.49 | 10.65 | 4.76 | 10.20 | 7.39  | 23.39 | 21.58 | 6.02 | 3.52 | 806 |

OCCURENCE DES OBSERVATIONS

|           | NORD  | NE    | EST  | SE    | SUD   | SW    | WEST  | NW   | CALM | TOT  |
|-----------|-------|-------|------|-------|-------|-------|-------|------|------|------|
| HIVER     | 12.75 | 11.08 | 4.18 | 7.93  | 5.03  | 24.60 | 24.89 | 4.22 | 5.33 | 806  |
| PRINTEMPS | 14.92 | 14.59 | 5.85 | 10.33 | 7.15  | 19.02 | 19.36 | 6.23 | 2.55 | 806  |
| ETE       | 9.66  | 6.69  | 3.14 | 10.70 | 10.83 | 29.10 | 20.19 | 7.69 | 2.01 | 806  |
| AUTOMNE   | 12.64 | 10.23 | 5.87 | 11.83 | 6.51  | 20.84 | 21.94 | 5.92 | 4.23 | 806  |
| JANVIER   | 110   | 82    | 31   | 68    | 37    | 210   | 207   | 24   | 37   | 806  |
| FEVRIER   | 70    | 91    | 25   | 52    | 47    | 194   | 181   | 28   | 46   | 734  |
| MARS      | 132   | 104   | 46   | 66    | 34    | 172   | 184   | 37   | 31   | 806  |
| AVRIL     | 125   | 124   | 52   | 77    | 57    | 117   | 153   | 61   | 14   | 780  |
| MAI       | 100   | 121   | 42   | 104   | 80    | 166   | 126   | 51   | 16   | 806  |
| JUIN      | 68    | 68    | 27   | 87    | 73    | 225   | 161   | 59   | 14   | 780  |
| JUILLET   | 70    | 36    | 9    | 84    | 88    | 248   | 169   | 75   | 17   | 806  |
| AOUT      | 95    | 56    | 39   | 85    | 88    | 223   | 153   | 50   | 17   | 806  |
| SEPTEMBRE | 96    | 63    | 43   | 106   | 58    | 164   | 160   | 58   | 31   | 780  |
| OCTOBRE   | 111   | 73    | 48   | 100   | 52    | 183   | 167   | 41   | 31   | 806  |
| NOVEMBRE  | 92    | 106   | 48   | 74    | 43    | 146   | 192   | 41   | 38   | 780  |
| DECEMBRE  | 118   | 87    | 42   | 66    | 34    | 173   | 196   | 47   | 42   | 806  |
| ANNUEL    | 1186  | 1011  | 452  | 969   | 702   | 2221  | 2049  | 572  | 334  | 8496 |

|           | NORD | NE  | EST | SE  | SUD | SW  | WEST | NW  | CALM | TOT  |
|-----------|------|-----|-----|-----|-----|-----|------|-----|------|------|
| HIVER     | 299  | 260 | 98  | 186 | 118 | 577 | 584  | 99  | 125  | 2346 |
| PRINTEMPS | 357  | 348 | 140 | 247 | 171 | 455 | 463  | 148 | 61   | 2382 |
| ETE       | 231  | 160 | 75  | 256 | 259 | 696 | 483  | 184 | 48   | 2392 |
| AUTOMNE   | 289  | 242 | 138 | 280 | 154 | 493 | 519  | 140 | 100  | 2366 |



STATISTIQUES SUR LES VENTS  
OBSERVATIONS A 8H ET 18H (HME)

STATION: 7025250 (R-6)

PERIODE: 1977-1989

NOM : MONTREAL-INTERNATIONAL-A

SEQUENCE: 235050

VITESSE MOYENNE PAR DIRECTION (KM/H)

|           | NORD  | NE    | EST   | SE    | SUD   | SW    | WEST  | NM    | VIT.MOY.C.M.VIT.TOT. | OBS.ECT. | TYPE  | CO.VAR. |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|----------|-------|---------|
| JANVIER   | 13.49 | 20.59 | 10.42 | 14.78 | 12.00 | 19.59 | 17.13 | 9.67  | 15.93                | 806      | 10.36 | 65.08   |
| FEBVIER   | 13.64 | 16.80 | 10.40 | 15.17 | 10.32 | 15.22 | 16.93 | 8.25  | 14.04                | 734      | 9.01  | 64.22   |
| MARS      | 13.15 | 18.25 | 12.67 | 15.27 | 9.35  | 16.42 | 19.67 | 11.00 | 15.38                | 806      | 9.11  | 59.22   |
| AVRIL     | 15.23 | 17.98 | 13.13 | 15.27 | 9.77  | 17.77 | 18.84 | 17.00 | 16.09                | 780      | 8.33  | 51.76   |
| MAI       | 14.09 | 16.56 | 9.88  | 12.40 | 8.76  | 15.77 | 17.31 | 15.31 | 14.15                | 806      | 7.69  | 64.36   |
| JUIN      | 12.53 | 12.78 | 9.48  | 12.84 | 10.10 | 14.99 | 19.38 | 13.76 | 13.42                | 780      | 7.00  | 52.15   |
| JUILLET   | 9.23  | 11.81 | 8.89  | 10.21 | 9.32  | 13.61 | 13.40 | 13.21 | 11.85                | 806      | 6.45  | 54.46   |
| AOUT      | 11.04 | 11.27 | 8.08  | 10.49 | 10.03 | 12.99 | 12.41 | 11.62 | 11.35                | 806      | 6.11  | 53.88   |
| SEPTEMBRE | 10.30 | 12.52 | 9.35  | 11.44 | 9.17  | 13.85 | 13.11 | 10.88 | 11.45                | 780      | 6.66  | 58.19   |
| OCTOBRE   | 12.55 | 14.32 | 9.56  | 13.83 | 11.96 | 15.70 | 14.10 | 10.49 | 13.10                | 806      | 8.30  | 63.37   |
| NOVEMBRE  | 12.62 | 16.60 | 10.46 | 14.08 | 14.42 | 19.73 | 16.32 | 9.07  | 14.71                | 806      | 9.16  | 62.24   |
| DECEMBRE  | 10.35 | 17.32 | 11.12 | 14.53 | 13.91 | 19.08 | 17.32 | 10.13 | 14.55                | 806      | 9.47  | 64.62   |
| ANNUEL    | 12.47 | 16.21 | 10.51 | 13.14 | 10.39 | 16.01 | 16.06 | 12.25 | 13.84                | 261.94   | 8.39  | 60.62   |

|           | NORD | NE   | EST | SE  | SUD | SW   | WEST | NM  | CALM | V.<6  | 6-12  | 12-20 | 20-29 | 29-39 | V.>39 |
|-----------|------|------|-----|-----|-----|------|------|-----|------|-------|-------|-------|-------|-------|-------|
| JANVIER   | 110  | 82   | 31  | 68  | 37  | 210  | 207  | 24  | 37   | 12.80 | 26.80 | 28.29 | 22.83 | 6.45  | 2.73  |
| FEBVIER   | 70   | 91   | 25  | 52  | 47  | 194  | 181  | 28  | 46   | 15.12 | 29.70 | 30.25 | 18.26 | 5.86  | 0.82  |
| MARS      | 122  | 104  | 46  | 66  | 34  | 172  | 184  | 37  | 31   | 11.04 | 31.02 | 28.16 | 21.71 | 7.20  | 0.67  |
| AVRIL     | 125  | 124  | 52  | 77  | 57  | 117  | 153  | 61  | 14   | 7.18  | 26.67 | 35.51 | 23.46 | 6.41  | 0.77  |
| MAI       | 100  | 121  | 42  | 104 | 80  | 166  | 126  | 51  | 16   | 9.06  | 34.00 | 36.23 | 16.25 | 3.85  | 0.13  |
| JUIN      | 66   | 68   | 27  | 87  | 73  | 225  | 161  | 59  | 14   | 9.87  | 35.00 | 37.56 | 14.87 | 2.86  | 0.12  |
| JUILLET   | 70   | 36   | 9   | 84  | 98  | 248  | 169  | 75  | 17   | 13.77 | 40.20 | 34.12 | 10.55 | 1.36  | 0.00  |
| AOUT      | 95   | 56   | 39  | 85  | 88  | 223  | 153  | 50  | 17   | 13.65 | 42.06 | 35.36 | 7.84  | 0.89  | 0.00  |
| SEPTEMBRE | 86   | 63   | 43  | 105 | 59  | 164  | 160  | 58  | 31   | 15.51 | 41.82 | 31.28 | 9.74  | 1.54  | 0.00  |
| OCTOBRE   | 111  | 73   | 48  | 100 | 52  | 183  | 167  | 41  | 31   | 13.65 | 37.59 | 30.77 | 12.78 | 4.59  | 0.62  |
| NOVEMBRE  | 92   | 106  | 48  | 74  | 43  | 146  | 182  | 41  | 38   | 12.82 | 29.10 | 32.31 | 18.46 | 6.15  | 1.15  |
| DECEMBRE  | 119  | 87   | 42  | 66  | 34  | 173  | 196  | 47  | 42   | 15.14 | 29.53 | 27.54 | 20.35 | 5.98  | 1.49  |
| ANNUEL    | 1186 | 1011 | 452 | 969 | 702 | 2221 | 2049 | 572 | 334  | 12.47 | 33.67 | 32.28 | 16.42 | 4.40  | 0.77  |

OCCURENCE DES OBSERVATIONS

FREQUENCE DES VITESSES PAR CLASSE

|           | NORD | NE   | EST | SE  | SUD | SW   | WEST | NM  | CALM | V.<6  | 6-12  | 12-20 | 20-29 | 29-39 | V.>39 |
|-----------|------|------|-----|-----|-----|------|------|-----|------|-------|-------|-------|-------|-------|-------|
| JANVIER   | 110  | 82   | 31  | 68  | 37  | 210  | 207  | 24  | 37   | 12.80 | 26.80 | 28.29 | 22.83 | 6.45  | 2.73  |
| FEBVIER   | 70   | 91   | 25  | 52  | 47  | 194  | 181  | 28  | 46   | 15.12 | 29.70 | 30.25 | 18.26 | 5.86  | 0.82  |
| MARS      | 122  | 104  | 46  | 66  | 34  | 172  | 184  | 37  | 31   | 11.04 | 31.02 | 28.16 | 21.71 | 7.20  | 0.67  |
| AVRIL     | 125  | 124  | 52  | 77  | 57  | 117  | 153  | 61  | 14   | 7.18  | 26.67 | 35.51 | 23.46 | 6.41  | 0.77  |
| MAI       | 100  | 121  | 42  | 104 | 80  | 166  | 126  | 51  | 16   | 9.06  | 34.00 | 36.23 | 16.25 | 3.85  | 0.13  |
| JUIN      | 66   | 68   | 27  | 87  | 73  | 225  | 161  | 59  | 14   | 9.87  | 35.00 | 37.56 | 14.87 | 2.86  | 0.12  |
| JUILLET   | 70   | 36   | 9   | 84  | 98  | 248  | 169  | 75  | 17   | 13.77 | 40.20 | 34.12 | 10.55 | 1.36  | 0.00  |
| AOUT      | 95   | 56   | 39  | 85  | 88  | 223  | 153  | 50  | 17   | 13.65 | 42.06 | 35.36 | 7.84  | 0.89  | 0.00  |
| SEPTEMBRE | 86   | 63   | 43  | 105 | 59  | 164  | 160  | 58  | 31   | 15.51 | 41.82 | 31.28 | 9.74  | 1.54  | 0.00  |
| OCTOBRE   | 111  | 73   | 48  | 100 | 52  | 183  | 167  | 41  | 31   | 13.65 | 37.59 | 30.77 | 12.78 | 4.59  | 0.62  |
| NOVEMBRE  | 92   | 106  | 48  | 74  | 43  | 146  | 182  | 41  | 38   | 12.82 | 29.10 | 32.31 | 18.46 | 6.15  | 1.15  |
| DECEMBRE  | 119  | 87   | 42  | 66  | 34  | 173  | 196  | 47  | 42   | 15.14 | 29.53 | 27.54 | 20.35 | 5.98  | 1.49  |
| ANNUEL    | 1186 | 1011 | 452 | 969 | 702 | 2221 | 2049 | 572 | 334  | 12.47 | 33.67 | 32.28 | 16.42 | 4.40  | 0.77  |

|           | NORD | NE   | EST | SE  | SUD | SW   | WEST | NM  | CALM | V.<6  | 6-12  | 12-20 | 20-29 | 29-39 | V.>39 |
|-----------|------|------|-----|-----|-----|------|------|-----|------|-------|-------|-------|-------|-------|-------|
| JANVIER   | 110  | 82   | 31  | 68  | 37  | 210  | 207  | 24  | 37   | 12.80 | 26.80 | 28.29 | 22.83 | 6.45  | 2.73  |
| FEBVIER   | 70   | 91   | 25  | 52  | 47  | 194  | 181  | 28  | 46   | 15.12 | 29.70 | 30.25 | 18.26 | 5.86  | 0.82  |
| MARS      | 122  | 104  | 46  | 66  | 34  | 172  | 184  | 37  | 31   | 11.04 | 31.02 | 28.16 | 21.71 | 7.20  | 0.67  |
| AVRIL     | 125  | 124  | 52  | 77  | 57  | 117  | 153  | 61  | 14   | 7.18  | 26.67 | 35.51 | 23.46 | 6.41  | 0.77  |
| MAI       | 100  | 121  | 42  | 104 | 80  | 166  | 126  | 51  | 16   | 9.06  | 34.00 | 36.23 | 16.25 | 3.85  | 0.13  |
| JUIN      | 66   | 68   | 27  | 87  | 73  | 225  | 161  | 59  | 14   | 9.87  | 35.00 | 37.56 | 14.87 | 2.86  | 0.12  |
| JUILLET   | 70   | 36   | 9   | 84  | 98  | 248  | 169  | 75  | 17   | 13.77 | 40.20 | 34.12 | 10.55 | 1.36  | 0.00  |
| AOUT      | 95   | 56   | 39  | 85  | 88  | 223  | 153  | 50  | 17   | 13.65 | 42.06 | 35.36 | 7.84  | 0.89  | 0.00  |
| SEPTEMBRE | 86   | 63   | 43  | 105 | 59  | 164  | 160  | 58  | 31   | 15.51 | 41.82 | 31.28 | 9.74  | 1.54  | 0.00  |
| OCTOBRE   | 111  | 73   | 48  | 100 | 52  | 183  | 167  | 41  | 31   | 13.65 | 37.59 | 30.77 | 12.78 | 4.59  | 0.62  |
| NOVEMBRE  | 92   | 106  | 48  | 74  | 43  | 146  | 182  | 41  | 38   | 12.82 | 29.10 | 32.31 | 18.46 | 6.15  | 1.15  |
| DECEMBRE  | 119  | 87   | 42  | 66  | 34  | 173  | 196  | 47  | 42   | 15.14 | 29.53 | 27.54 | 20.35 | 5.98  | 1.49  |
| ANNUEL    | 1186 | 1011 | 452 | 969 | 702 | 2221 | 2049 | 572 | 334  | 12.47 | 33.67 | 32.28 | 16.42 | 4.40  | 0.77  |