

ANNEXE L

Données sur l'estimation du risque potentiel (méthanol)

- Figure 17, rayon d'impact de l'estimation du risque potentiel (méthanol)
- Tableaux (3) des paramètres de calcul
 - scénario normalisé (IDLH/10)
 - scénario normalisé (IDLH)
 - scénario alternatif (IDLH/10)



Légende:

- Limite d'arrondissement
- Voie ferrée
- Terrain exploité par Canterm

PRINCIPALES ENTREPRISES INDUSTRIELLES DU SECTEUR D'EMPLOIS
Référence: Identification sur place

- Carrière Lafarge
- Port de Montréal
- Transbordement de matières résiduelles
- Petro-Canada
- Interquisa Canada
- Installations portuaires et entreposage
- Ashland Canada (ESSO)
- Shell Canada
- Métallurgie Noranda, affinerie CRR
- Nexans
- Tuyau Wolverine Canada Inc.
- COASTAL
- MCS Conteneurs
- Ultramar Canada Ltée

PRINCIPAUX ÉQUIPEMENTS COLLECTIFS, ESPACES ET LIEUX PUBLICS
Référence: Montréal à la carte, ville de Montréal (informations répertoriées en mars 2002)

- Aréna
- Centre récréatif et autres centres
- Centre local de services aux citoyens
- Caserne de pompier
- Établissements scolaires
- Éco-quartier
- Jardins communautaires
- Parcs municipaux

ESTIMATION DU RISQUE POTENTIEL

- Réservoir projeté sur le site K-1

Scénario normalisé

- IDLH/10, rayon de 1700 m
- IDLH, rayon de 430 m

Scénario alternatif

- IDLH/10, rayon de 127 m
- IDLH, rayon de 41 m

AUTRE(S) RÉFÉRENCE(S):
- Photographies aériennes mai 2004.

Échelle graphique pour 1:15 000
0 m 200 m 400 m 600 m 800 m

Échelle graphique pour 1:7 500
0 m 100 m 200 m 300 m 400 m

canterm

Projet: **CONSTRUCTION DE RÉSERVOIRS ADDITIONNELS D'ENTREPOSAGE DE PRODUITS LIQUIDES**

Titre: **Rayon d'impact de l'estimation du risque potentiel d'accident (méthanol)**

Echelle approx.: Telles qu'indiquées RÉFÉRENCE:

Préparé par: Claude Veilleux, ing & agr. Dessiné par: Patrick Gravel, dess. Vérifié par: Claude Veilleux, ing & agr.

UDV **UDV** Groupe Conseil UDA inc. Agriculture, foresterie et environnement Dossier: 04-2623 Page: 17 Date: 05-05-17

Échelle approx.: 1:15 000



SITE DATA INFORMATION:

Location: MONTREAL, CANADA
Building Air Exchanges Per Hour: 0.25 (sheltered single storied)
Time: May 3, 2005 0000 hours DST (user specified)

CHEMICAL INFORMATION:

Chemical Name: METHANOL Molecular Weight: 32.04 kg/kmol
TLV-TWA: 200 ppm IDLH: 6000 ppm
Footprint Level of Concern: 600 ppm
Boiling Point: 64.70° C
Vapor Pressure at Ambient Temperature: 0.17 atm
Ambient Saturation Concentration: 166,804 ppm or 16.7%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/sec from w at 10 meters
No Inversion Height
Stability Class: F Air Temperature: 25° C
Relative Humidity: 50% Ground Roughness: urban or forest
Cloud Cover: 0 tenths

SOURCE STRENGTH INFORMATION:

Leak from hole in vertical cylindrical tank
Tank Diameter: 150 feet Tank Length: 48 feet
Tank Volume: 6,345,201 gallons
Tank contains liquid
Internal Temperature: 25° C
Chemical Mass in Tank: 18,831,614 kilograms
Tank is 99% full
Circular Opening Diameter: 85 feet
Opening is 0 feet from tank bottom
Soil Type: Default
Ground Temp: equal to ambient
Max Puddle Area: 31400 square meters
Release Duration: ALOHA limited the duration to 1 hour
Max Computed Release Rate: 1,060 kilograms/min
Max Average Sustained Release Rate: 1,050 kilograms/min
(averaged over a minute or more)
Total Amount Released: 59,804 kilograms
Note: The chemical escaped as a liquid and formed an evaporating puddle.

FOOTPRINT INFORMATION:

Model Run: Heavy Gas
User-specified LOC: 600 ppm
Max Threat Zone for LOC: 1.7 kilometers



SITE DATA INFORMATION:

Location: MONTREAL, CANADA
Building Air Exchanges Per Hour: 0.25 (sheltered single storied)
Time: May 3, 2005 0000 hours DST (user specified)

CHEMICAL INFORMATION:

Chemical Name: METHANOL Molecular Weight: 32.04 kg/kmol
TLV-TWA: 200 ppm IDLH: 6000 ppm
Footprint Level of Concern: 6000 ppm
Boiling Point: 64.70° C
Vapor Pressure at Ambient Temperature: 0.17 atm
Ambient Saturation Concentration: 166,804 ppm or 16.7%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 1.5 meters/sec from w at 10 meters
No Inversion Height
Stability Class: F Air Temperature: 25° C
Relative Humidity: 50% Ground Roughness: urban or forest
Cloud Cover: 0 tenths

SOURCE STRENGTH INFORMATION:

Leak from hole in vertical cylindrical tank
Tank Diameter: 150 feet Tank Length: 48 feet
Tank Volume: 6,345,201 gallons
Tank contains liquid
Internal Temperature: 25° C
Chemical Mass in Tank: 18,831,614 kilograms
Tank is 99% full
Circular Opening Diameter: 85 feet
Opening is 0 feet from tank bottom
Soil Type: Default
Ground Temp: equal to ambient
Max Puddle Area: 31400 square meters
Release Duration: ALOHA limited the duration to 1 hour
Max Computed Release Rate: 1,060 kilograms/min
Max Average Sustained Release Rate: 1,050 kilograms/min
(averaged over a minute or more)
Total Amount Released: 59,804 kilograms
Note: The chemical escaped as a liquid and formed an evaporating puddle.

FOOTPRINT INFORMATION:

Model Run: Heavy Gas
User-specified LOC: equals IDLH (6000 ppm)
Max Threat Zone for LOC: 431 meters



SITE DATA INFORMATION:

Location: MONTREAL, CANADA
Building Air Exchanges Per Hour: 0.34 (sheltered single storied)
Time: May 3, 2005 1652 hours DST (user specified)

CHEMICAL INFORMATION:

Chemical Name: METHANOL Molecular Weight: 32.04 kg/kmol
TLV-TWA: 200 ppm IDLH: 6000 ppm
Footprint Level of Concern: 600 ppm
Boiling Point: 64.70° C
Vapor Pressure at Ambient Temperature: 0.17 atm
Ambient Saturation Concentration: 166,804 ppm or 16.7%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 3 meters/sec from w at 10 meters
No Inversion Height
Stability Class: D Air Temperature: 25° C
Relative Humidity: 50% Ground Roughness: urban or forest
Cloud Cover: 10 tenths

SOURCE STRENGTH INFORMATION:

Leak from short pipe or valve in vertical cylindrical tank
Tank Diameter: 150 feet Tank Length: 48 feet
Tank Volume: 6,345,201 gallons
Tank contains liquid
Internal Temperature: 25° C
Chemical Mass in Tank: 18,831,614 kilograms
Tank is 99% full
Circular Opening Diameter: 2 inches
Opening is 0 feet from tank bottom
Soil Type: Default
Ground Temp: equal to ambient
Max Puddle Area: 31400 square meters
Release Duration: ALOHA limited the duration to 1 hour
Max Computed Release Rate: 193 kilograms/min
Max Average Sustained Release Rate: 180 kilograms/min
 (averaged over a minute or more)
Total Amount Released: 6,863 kilograms
Note: The chemical escaped as a liquid and formed an evaporating puddle.

FOOTPRINT INFORMATION:

Dispersion Module: Gaussian
User-specified LOC: 600 ppm
Max Threat Zone for LOC: 127 meters
Max Threat Zone for IDLH: 41 meters