NYC 9/11 Public Portal Document



Text Summary ALOHA® 5.2.3

SITE DATA INFORMATION:
Location: NEW YORK, NEW YORK
Building Air Exchanges Per Hour: 0.35 (sheltered single storied)
Time: December 12, 2001 1710 hours EST (user specified)

CHEMICAL INFORMATION:
Chemical Name: CHLORODIFLUOROMETHANE
Molecular Weight: 86.47 kg/kmol
TLV-TWA: 1000 ppm IDLH: 50000 ppm
Default LOC from Library: 50000 ppm
Footprint Level of Concern: 50000 ppm
Boiling Point: -41.49° F
Vapor Pressure at Ambient Temperature: greater than 1 atm
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)
Wind: 2 knots from W at 3 meters
No Inversion Height
Stability Class: F Air Temperature: 50° F
Relative Humidity: 50% Ground Roughness: urban or forest
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:
Leak from hole in spherical tank
Tank Diameter: 10 feet
Tank Volume: 3,917 gallons
Tank contains liquid
Internal Temperature: 50° F
Chemical Mass in Tank: 22000 pounds
Tank is 54% full
Circular Opening Diameter: 6 inches
Opening is 0 feet from tank bottom
Release Duration: 1 minute
Max Computed Release Rate: 947 pounds/sec
Max Average Sustained Release Rate: 367 pounds/sec
(averaged over a minute or more)
Total Amount Released: 22,000 pounds
Note: The chemical escaped as a mixture of gas and aerosol (two phase flow).

FOOTPRINT INFORMATION:
Model Run: Heavy Gas
User-specified LOC: 50000 ppm
Max Threat Zone for LOC: 219 yards

NYC-WTC_000304596

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No Inversion Height
Stability Class: F Air Temperature: 50° F
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Release Duration: 1 minute
Max Computed Release Rate: 947 pounds/sec
Max Average Sustained Release Rate: 367 pounds/sec
(averaged over a minute or more)
Total Amount Released: 22,000 pounds
Note: The chemical escaped as a mixture of gas and aerosol (two phase flow).

FOOTPRINT INFORMATION:
Model Run: Heavy Gas
User-specified LOC: 1000 ppm
Max Threat Zone for LOC: 921 yards

NYC-WTC_000304597

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CHEMICAL INFORMATION:
Chemical Name: CHLORODIFLUOROMETHANE
Molecular Weight: 86.47 kg/kmol
TLV-TWA: 1000 ppm IDLH: 50000 ppm
Default LOC from Library: 50000 ppm
Footprint Level of Concern: 50000 ppm
Boiling Point: -41.49° F
Vapor Pressure at Ambient Temperature: greater than 1 atm
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)
Wind: 2 knots from W at 3 meters
No Inversion Height
Stability Class: F Air Temperature: 50° F
Relative Humidity: 50% Ground Roughness: urban or forest
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:
Pipe Diameter: 6 inches Pipe Length: 1343 feet
Pipe Temperature: 50° F Pipe Press: 2 atmospheres
Pipe Roughness: smooth Hole Area: 28.3 sq in
Unbroken end of the pipe is connected to an infinite source
Release Duration: ALOHA limited the duration to 1 hour
Max Computed Release Rate: 953 pounds/min
Max Average Sustained Release Rate: 374 pounds/min
(averaged over a minute or more)
Total Amount Released: 21,997 pounds

FOOTPRINT INFORMATION:
Model Run: Heavy Gas
User-specified LOC: 50000 ppm
Max Threat Zone for LOC: 34 yards
Note: Footprint was not drawn because effects of
near-field patchiness make dispersion predictions
unreliable for short distances.

NYC-WTC_000304598

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CHEMICAL INFORMATION:
Chemical Name: CHLORODIFLUOROMETHANE
Molecular Weight: 86.47 kg/kmol
TLV-TWA: 1000 ppm IDLH: 50000 ppm
Default LOC from Library: 1000 ppm
Footprint Level of Concern: 1000 ppm
Boiling Point: -41.49° F
Vapor Pressure at Ambient Temperature: greater than 1 atm
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)
Wind: 2 knots from W at 3 meters
No Inversion Height
Stability Class: F Air Temperature: 50° F
Relative Humidity: 50% Ground Roughness: urban or forest
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:
Pipe Diameter: 6 inches Pipe Length: 1343 feet
Pipe Temperature: 50° F Pipe Press: 2 atmospheres
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Unbroken end of the pipe is connected to an infinite source
Release Duration: ALOHA limited the duration to 1 hour
Max Computed Release Rate: 953 pounds/min
Max Average Sustained Release Rate: 374 pounds/min
(averaged over a minute or more)
Total Amount Released: 21,997 pounds

FOOTPRINT INFORMATION:
Model Run: Heavy Gas
User-specified LOC: 1000 ppm
Max Threat Zone for LOC: 218 yards

NYC-WTC_000304599