

Modélisation de la dispersion atmosphérique des
toxiques en cas d'incendie de trois cellules de
stockage de pneumatiques

Incendie de trois cellules de stockage
Dispersion des suies
Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1445 hours ST (using computer's clock)

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 2 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: A (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 83.01 kilograms/sec Source Height: 332 meters
Release Duration: 60 minutes
Release Rate: 4,980 kilograms/min
Total Amount Released: 298,836 kilograms

FOOTPRINT INFORMATION:

Dispersion Module: Gaussian
Yellow LOC (79 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because
the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion des suies
Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1446 hours ST (using computer's clock)

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 5 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: D Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 83.01 kilograms/sec Source Height: 133 meters
Release Duration: 60 minutes
Release Rate: 4,980 kilograms/min
Total Amount Released: 298,836 kilograms

FOOTPRINT INFORMATION:

Dispersion Module: Gaussian
Yellow LOC (79 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because
the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion des suies
Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1448 hours ST (using computer's clock)

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 3 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: F (user override) Air Temperature: 15° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 83.01 kilograms/sec Source Height: 221 meters
Release Duration: 60 minutes
Release Rate: 4,980 kilograms/min
Total Amount Released: 298,836 kilograms

FOOTPRINT INFORMATION:

Dispersion Module: Gaussian
Yellow LOC (79 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because
the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion du Monoxyde de carbone
Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1452 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON MONOXIDE Molecular Weight: 28.01 g/mol
ERPG-3: 500 ppm ERPG-2: 350 ppm ERPG-1: 200 ppm
IDLH: 1200 ppm
Normal Boiling Point: -191.5° C Ambient Boiling Point: -191.7° C
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 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: A (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 40.27 kilograms/sec Source Height: 332 meters
Release Duration: 60 minutes
Release Rate: 2,420 kilograms/min
Total Amount Released: 144,972 kilograms
Note: This chemical may flash boil and/or result in two phase flow.
Use both dispersion modules to investigate its potential behavior.

FOOTPRINT INFORMATION:

Dispersion Module: Gaussian
Red LOC (3680 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because
the ground level concentrations never exceed the LOC.
Orange LOC (920 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because
the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion du Monoxyde de carbone
Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1453 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON MONOXIDE Molecular Weight: 28.01 g/mol
ERPG-3: 500 ppm ERPG-2: 350 ppm ERPG-1: 200 ppm
IDLH: 1200 ppm
Normal Boiling Point: -191.5° C Ambient Boiling Point: -191.7° C
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: 5 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: D Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 40.27 kilograms/sec Source Height: 133 meters
Release Duration: 60 minutes
Release Rate: 2,420 kilograms/min
Total Amount Released: 144,972 kilograms
Note: This chemical may flash boil and/or result in two phase flow.
Use both dispersion modules to investigate its potential behavior.

FOOTPRINT INFORMATION:

Dispersion Module: Gaussian
Red LOC (3680 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because
the ground level concentrations never exceed the LOC.
Orange LOC (920 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because
the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion du Monoxyde de carbone
Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1455 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON MONOXIDE Molecular Weight: 28.01 g/mol
ERPG-3: 500 ppm ERPG-2: 350 ppm ERPG-1: 200 ppm
IDLH: 1200 ppm
Normal Boiling Point: -191.5° C Ambient Boiling Point: -191.7° C
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: 3 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: F (user override) Air Temperature: 15° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 40.27 kilograms/sec Source Height: 221 meters
Release Duration: 60 minutes
Release Rate: 2,420 kilograms/min
Total Amount Released: 144,972 kilograms
Note: This chemical may flash boil and/or result in two phase flow.
Use both dispersion modules to investigate its potential behavior.

FOOTPRINT INFORMATION:

Dispersion Module: Gaussian
Red LOC (3680 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because
the ground level concentrations never exceed the LOC.
Orange LOC (920 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because
the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion du Dioxyde de carbone
Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1502 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON DIOXIDE Molecular Weight: 44.01 g/mol
TEEL-3: 40000 ppm TEEL-2: 30000 ppm TEEL-1: 30000 ppm
IDLH: 40000 ppm
Normal Boiling Point: -unavail-
Vapor Pressure at Ambient Temperature: greater than 1 atm
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%
Note: Not enough chemical data to use Heavy Gas option

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 2 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: A (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 1073.61 kilograms/sec
Source Height: 332 meters
Release Duration: 60 minutes
Release Rate: 64,400 kilograms/min
Total Amount Released: 3,864,996 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (89980 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion du Dioxyde de carbone
Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1504 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON DIOXIDE Molecular Weight: 44.01 g/mol
TEEL-3: 40000 ppm TEEL-2: 30000 ppm TEEL-1: 30000 ppm
IDLH: 40000 ppm
Normal Boiling Point: -unavail-
Vapor Pressure at Ambient Temperature: greater than 1 atm
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%
Note: Not enough chemical data to use Heavy Gas option

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 5 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: D Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 1073.61 kilograms/sec
Source Height: 133 meters
Release Duration: 60 minutes
Release Rate: 64,400 kilograms/min
Total Amount Released: 3,864,996 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (89980 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion du Dioxyde de carbone
Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1505 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON DIOXIDE Molecular Weight: 44.01 g/mol
TEEL-3: 40000 ppm TEEL-2: 30000 ppm TEEL-1: 30000 ppm
IDLH: 40000 ppm
Normal Boiling Point: -unavail-
Vapor Pressure at Ambient Temperature: greater than 1 atm
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%
Note: Not enough chemical data to use Heavy Gas option

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 3 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: F (user override) Air Temperature: 15° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 1073.61 kilograms/sec
Source Height: 221 meters
Release Duration: 60 minutes
Release Rate: 64,400 kilograms/min
Total Amount Released: 3,864,996 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (89980 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion du SO₂
Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1506 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: SULFUR DIOXIDE Molecular Weight: 64.06 g/mol
ERPG-3: 15 ppm ERPG-2: 3 ppm ERPG-1: 0.3 ppm
IDLH: 100 ppm
Carcinogenic risk - see CAMEO
Normal Boiling Point: -10.0° C Ambient Boiling Point: -10.2° C
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 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: A (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 5.45 kilograms/sec Source Height: 332 meters
Release Duration: 60 minutes
Release Rate: 327 kilograms/min
Total Amount Released: 19,620 kilograms
Note: This chemical may flash boil and/or result in two phase flow.

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (1885 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (211 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage
Dispersion du SO₂
Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1507 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: SULFUR DIOXIDE Molecular Weight: 64.06 g/mol
ERPG-3: 15 ppm ERPG-2: 3 ppm ERPG-1: 0.3 ppm
IDLH: 100 ppm
Carcinogenic risk - see CAMEO
Normal Boiling Point: -10.0° C Ambient Boiling Point: -10.2° C
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: 5 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: D Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 5.45 kilograms/sec Source Height: 133 meters
Release Duration: 60 minutes
Release Rate: 327 kilograms/min
Total Amount Released: 19,620 kilograms
Note: This chemical may flash boil and/or result in two phase flow.

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (1885 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (211 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage
Dispersion du SO₂
Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1508 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: SULFUR DIOXIDE Molecular Weight: 64.06 g/mol
ERPG-3: 15 ppm ERPG-2: 3 ppm ERPG-1: 0.3 ppm
IDLH: 100 ppm
Carcinogenic risk - see CAMEO
Normal Boiling Point: -10.0° C Ambient Boiling Point: -10.2° C
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: 3 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: F (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 5.45 kilograms/sec Source Height: 221 meters
Release Duration: 60 minutes
Release Rate: 327 kilograms/min
Total Amount Released: 19,620 kilograms
Note: This chemical may flash boil and/or result in two phase flow..

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (1885 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (211 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion du NO₂
Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1512 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: NITROGEN DIOXIDE Molecular Weight: 46.01 g/mol
TEEL-3: 30 ppm TEEL-2: 15 ppm TEEL-1: 2 ppm
IDLH: 20 ppm
Normal Boiling Point: 21.0° C Ambient Boiling Point: 20.9° C
Vapor Pressure at Ambient Temperature: 0.95 atm
Ambient Saturation Concentration: 958,041 ppm or 95.8%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 2 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: A (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 1.55 kilograms/sec Source Height: 332 meters
Release Duration: 60 minutes
Release Rate: 93 kilograms/min
Total Amount Released: 5,580 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (132 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (75 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage
Dispersion du NO₂
Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1514 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: NITROGEN DIOXIDE Molecular Weight: 46.01 g/mol
TEEL-3: 30 ppm TEEL-2: 15 ppm TEEL-1: 2 ppm
IDLH: 20 ppm
Normal Boiling Point: 21.0° C Ambient Boiling Point: 20.9° C
Vapor Pressure at Ambient Temperature: 0.95 atm
Ambient Saturation Concentration: 958,041 ppm or 95.8%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 5 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: D Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 1.55 kilograms/sec Source Height: 133 meters
Release Duration: 60 minutes
Release Rate: 93 kilograms/min
Total Amount Released: 5,580 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (132 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (75 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage
Dispersion du NO₂
Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1516 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: NITROGEN DIOXIDE Molecular Weight: 46.01 g/mol
TEEL-3: 30 ppm TEEL-2: 15 ppm TEEL-1: 2 ppm
IDLH: 20 ppm
Normal Boiling Point: 21.0° C Ambient Boiling Point: 20.9° C
Vapor Pressure at Ambient Temperature: 0.95 atm
Ambient Saturation Concentration: 958,041 ppm or 95.8%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 3 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: F (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 1.55 kilograms/sec Source Height: 221 meters
Release Duration: 60 minutes
Release Rate: 93 kilograms/min
Total Amount Released: 5,580 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (132 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (75 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage
Dispersion du formol
Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1518 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: FORMIC ACID Molecular Weight: 46.03 g/mol
TEEL-3: 30 ppm TEEL-2: 10 ppm TEEL-1: 10 ppm
IDLH: 30 ppm
Normal Boiling Point: 100.6° C Ambient Boiling Point: 100.3° C
Vapor Pressure at Ambient Temperature: 0.044 atm
Ambient Saturation Concentration: 44,317 ppm or 4.43%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 2 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: A (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 0.06 kilograms/sec Source Height: 332 meters
Release Duration: 60 minutes
Release Rate: 3.6 kilograms/min
Total Amount Released: 216 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (31 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (12 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage
Dispersion du formol
Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1519 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: FORMIC ACID Molecular Weight: 46.03 g/mol
TEEL-3: 30 ppm TEEL-2: 10 ppm TEEL-1: 10 ppm
IDLH: 30 ppm
Normal Boiling Point: 100.6° C Ambient Boiling Point: 100.3° C
Vapor Pressure at Ambient Temperature: 0.044 atm
Ambient Saturation Concentration: 44,317 ppm or 4.43%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 5 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: D Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 0.06 kilograms/sec Source Height: 133 meters
Release Duration: 60 minutes
Release Rate: 3.6 kilograms/min
Total Amount Released: 216 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (31 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (12 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage
Dispersion du formol
Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1520 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: FORMIC ACID Molecular Weight: 46.03 g/mol
TEEL-3: 30 ppm TEEL-2: 10 ppm TEEL-1: 10 ppm
IDLH: 30 ppm
Normal Boiling Point: 100.6° C Ambient Boiling Point: 100.3° C
Vapor Pressure at Ambient Temperature: 0.044 atm
Ambient Saturation Concentration: 44,317 ppm or 4.43%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 3 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: F (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 0.06 kilograms/sec Source Height: 221 meters
Release Duration: 60 minutes
Release Rate: 3.6 kilograms/min
Total Amount Released: 216 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (31 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (12 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage
Dispersion des fumées d'incendie_ Seuils équivalents
Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1521 hours ST (using computer's clock)

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 2 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: A (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 1240.57 kilograms/sec
Source Height: 332 meters
Release Duration: 60 minutes
Release Rate: 74,400 kilograms/min
Total Amount Released: 4,466,052 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (11346 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (31018 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage
Dispersion des fumées d'incendie_ Seuls équivalents
Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1522 hours ST (using computer's clock)

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 5 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: D Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 1240.57 kilograms/sec
Source Height: 133 meters
Release Duration: 60 minutes
Release Rate: 74,400 kilograms/min
Total Amount Released: 4,466,052 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (31018 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (11346 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage
Dispersion des fumées d'incendie_ Seuils équivalents
Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: HENIN BEAUMONT, FRANCE
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)
Time: December 19, 2017 1523 hours ST (using computer's clock)

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 3 meters/sec from SW at 3 meters
No Inversion Height
Stability Class: F (user override) Air Temperature: 20° C
Relative Humidity: 50% Ground Roughness: open country
Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 1240.57 kilograms/sec
Source Height: 221 meters
Release Duration: 60 minutes
Release Rate: 74,400 kilograms/min
Total Amount Released: 4,466,052 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian
Red LOC (31018 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.
Orange LOC (11346 mg/(cu m)) Max Threat Zone: LOC is not exceeded
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC