Modélisation de la dispersion atmosphérique des toxiques en cas d'incendie de 3 cellules de stockage de pneumatiques

Incendie de 3 cellules de stockage de pneumatiques **Dispersion des suies**Condition A, vent 2 m/s

SITE DATA INFORMATION: Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: May 9, 2018 1547 hours ST (using computer's clock)

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 2 meters/sec from SW at 3 meters

No Inversion Height

Relative Humidity: 50% Ground Roughness: open country

Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 164 kilograms/sec Source Height: 437 meters

Release Duration: 60 minutes Release Rate: 9 840 kilograms/min

Total Amount Released: 590 400 kilograms

THREAT ZONE: (GAUSSIAN SELECTED)

Model Run: Gaussian

Red : LOC is not exceeded --- (79 mg/(cu m))

Incendie de 3 cellules de stockage de pneumatiques **Dispersion des suies**Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: May 9, 2018 1548 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: 164 kilograms/sec Source Height: 175 meters

Release Duration: 60 minutes Release Rate: 9 840 kilograms/min

Total Amount Released: 590 400 kilograms

THREAT ZONE: (GAUSSIAN SELECTED)

Model Run: Gaussian

Red: LOC is not exceeded --- (79 mg/(cu m))

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

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: May 9, 2018 1549 hours ST (using computer's clock)

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 3 meters/sec from SW at 3 meters

No Inversion Height

Relative Humidity: 50% Ground Roughness: open country

Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 164 kilograms/sec Source Height: 291 meters

Release Duration: 60 minutes Release Rate: 9 840 kilograms/min

Total Amount Released: 590 400 kilograms

THREAT ZONE: (GAUSSIAN SELECTED)

Model Run: Gaussian

Red : LOC is not exceeded --- (79 mg/(cu m))

Incendie de 3 cellules de stockage de pneumatiques Dispersion du Monoxyde de carbone

Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: May 9, 2018 1552 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON MONOXIDE Molecular Weight: 28,01 g/mol AEGL-1 (60 min): N/A AEGL-2 (60 min): 83 ppm AEGL-3 (60 min): 330 ppm

IDLH: 1200 ppm LEL: 125000 ppm UEL: 742000 ppm

Ambient Boiling Point: -191.7° C

Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1000000 ppm or 100,0%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 2 meters/sec from SW at 3 meters

No Inversion Height

Relative Humidity: 50% Ground Roughness: open country

Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 79,6 kilograms/sec Source Height: 437 meters

Release Duration: 60 minutes
Release Rate: 4 780 kilograms/min

Total Amount Released: 286 560 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: (GAUSS SELECTED)

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

Incendie de 3 cellules de stockage de pneumatiques Dispersion du Monoxyde de carbone

Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: May 9, 2018 1553 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON MONOXIDE Molecular Weight: 28,01 g/mol AEGL-1 (60 min): N/A AEGL-2 (60 min): 83 ppm AEGL-3 (60 min): 330 ppm

IDLH: 1200 ppm LEL: 125000 ppm UEL: 742000 ppm

Ambient Boiling Point: -191.7° C

Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1000000 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: 79,6 kilograms/sec Source Height: 175 meters

Release Duration: 60 minutes Release Rate: 4 780 kilograms/min

Total Amount Released: 286 560 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: (GAUSS SELECTED)

Dispersion Module: Gaussian

Red LOC (3680 mg/(cu m)) Max Threat Zone: LOC is not exceede

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

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du Monoxyde de carbone**

Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: May 9, 2018 1553 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON MONOXIDE Molecular Weight: 28,01 g/mol AEGL-1 (60 min): N/A AEGL-2 (60 min): 83 ppm AEGL-3 (60 min): 330 ppm

IDLH: 1200 ppm LEL: 125000 ppm UEL: 742000 ppm

Ambient Boiling Point: -191.7° C

Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1000000 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: 79,6 kilograms/sec Source Height: 291 meters

Release Duration: 60 minutes Release Rate: 4 780 kilograms/min

Total Amount Released: 286 560 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: (GAUSS SELECTED)

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

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du Dioxyde de carbone**

Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: May 9, 2018 1555 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON DIOXIDE Molecular Weight: 44.01 g/mol

PAC-1: 30000 ppm PAC-2: 30000 ppm PAC-3: 50000 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: 1060.6 kilograms/sec Source Height: 330 meters

Release Duration: 60 minutes Release Rate: 63,600 kilograms/min

Total Amount Released: 3,818,160 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian

Red LOC (89980 mg/(cu m)) Max Threat Zone: LOC is not exceeded

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du Dioxyde de carbone**

Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: May 9, 2018 1556 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON DIOXIDE Molecular Weight: 44.01 g/mol

PAC-1: 30000 ppm PAC-2: 30000 ppm PAC-3: 50000 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: 1060.6 kilograms/sec Source Height: 132 meters

Release Duration: 60 minutes Release Rate: 63,600 kilograms/min

Total Amount Released: 3,818,160 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian

Red LOC (89980 mg/(cu m)) Max Threat Zone: LOC is not exceeded

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du Dioxyde de carbone**

Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: May 9, 2018 1558 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: CARBON DIOXIDE Molecular Weight: 44.01 g/mol

PAC-1: 30000 ppm PAC-2: 30000 ppm PAC-3: 50000 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

Relative Humidity: 50% Ground Roughness: open country

Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 1060.6 kilograms/sec Source Height: 220 meters

Release Duration: 60 minutes Release Rate: 63,600 kilograms/min

Total Amount Released: 3,818,160 kilograms

FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian

Red LOC (89980 mg/(cu m)) Max Threat Zone: LOC is not exceeded

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du SO**₂

Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: May 9, 2018 1602 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: SULFUR DIOXIDE Molecular Weight: 64,06 g/mol

AEGL-1 (60 min): 0.2 ppm AEGL-2 (60 min): 0.75 ppm AEGL-3 (60 min): 30 ppm

IDLH: 100 ppm

Ambient Boiling Point: -10.3° C

Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1000000 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: 1,77 kilograms/sec Source Height: 437 meters

Release Duration: 60 minutes Release Rate: 646 kilograms/min

Total Amount Released: 38 772 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

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du SO**₂

Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: May 9, 2018 1603 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: SULFUR DIOXIDE Molecular Weight: 64,06 g/mol

AEGL-1 (60 min): 0.2 ppm AEGL-2 (60 min): 0.75 ppm AEGL-3 (60 min): 30 ppm

IDLH: 100 ppm

Ambient Boiling Point: -10.3° C

Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1000000 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: 1,77 kilograms/sec Source Height: 175 meters

Release Duration: 60 minutes Release Rate: 646 kilograms/min

Total Amount Released: 38 772 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

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du SO**₂

Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: May 9, 2018 1605 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: SULFUR DIOXIDE Molecular Weight: 64,06 g/mol

AEGL-1 (60 min): 0.2 ppm AEGL-2 (60 min): 0.75 ppm AEGL-3 (60 min): 30 ppm

IDLH: 100 ppm

Ambient Boiling Point: -10.3° 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: 1,77 kilograms/sec Source Height: 291 meters

Release Duration: 60 minutes Release Rate: 646 kilograms/min

Total Amount Released: 38 772 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

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du NO**₂

Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: May 9, 2018 1607 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: NITROGEN DIOXIDE Molecular Weight: 46,01 g/mol AEGL-1 (60 min): 0.5 ppm AEGL-2 (60 min): 12 ppm AEGL-3 (60 min): 20 ppm

IDLH: 20 ppm

Ambient Boiling Point: 20.8° C

Vapor Pressure at Ambient Temperature: 0.95 atm Ambient Saturation Concentration: 959,180 ppm or 95.9%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 2 meters/sec from SW at 3 meters

No Inversion Height

Relative Humidity: 50% Ground Roughness: open country

Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 3,06 kilograms/sec Source Height: 437 meters

Release Duration: 60 minutes Release Rate: 184 kilograms/min

Total Amount Released: 11 016 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

Incendie de 3 cellules de stockage de pneumatiques Dispersion du NO₂

Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: May 9, 2018 1608 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: NITROGEN DIOXIDE Molecular Weight: 46,01 g/mol AEGL-1 (60 min): 0.5 ppm AEGL-2 (60 min): 12 ppm AEGL-3 (60 min): 20 ppm

IDLH: 20 ppm

Ambient Boiling Point: 20.8° C

Vapor Pressure at Ambient Temperature: 0.95 atm Ambient Saturation Concentration: 959,180 ppm or 95.9%

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: 3,06 kilograms/sec Source Height: 175 meters

Release Duration: 60 minutes Release Rate: 184 kilograms/min

Total Amount Released: 11 016 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

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du NO**₂

Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: May 9, 2018 1608 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: NITROGEN DIOXIDE Molecular Weight: 46,01 g/mol AEGL-1 (60 min): 0.5 ppm AEGL-2 (60 min): 12 ppm AEGL-3 (60 min): 20 ppm

IDLH: 20 ppm

Ambient Boiling Point: 20.8° C

Vapor Pressure at Ambient Temperature: 0.95 atm Ambient Saturation Concentration: 959,180 ppm or 95.9%

ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)

Wind: 3 meters/sec from SW at 3 meters

No Inversion Height

Relative Humidity: 50% Ground Roughness: open country

Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION:

Direct Source: 3,06 kilograms/sec Source Height: 291 meters

Release Duration: 60 minutes Release Rate: 184 kilograms/min

Total Amount Released: 11 016 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

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du formol**

Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: May 9, 2018 1610 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: FORMIC ACID Molecular Weight: 46,03 g/mol

Ambient Boiling Point: 100.2° C

Vapor Pressure at Ambient Temperature: 0.044 atm Ambient Saturation Concentration: 44,376 ppm or 4.44%

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: 0,122 kilograms/sec Source Height: 437 meters

Release Duration: 60 minutes Release Rate: 7,32 kilograms/min Total Amount Released: 439 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

Incendie de 3 cellules de stockage de pneumatiques Dispersion du formol

Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: May 9, 2018 1612 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: FORMIC ACID Molecular Weight: 46,03 g/mol

ERPG-1: 3 ppm ERPG-2: 25 ppm ERPG-3: 250 ppm IDLH: 30 ppm LEL: 120000 ppm UEL: 380000 ppm

Ambient Boiling Point: 100.2° C

Vapor Pressure at Ambient Temperature: 0.044 atm Ambient Saturation Concentration: 44,376 ppm or 4.44%

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: 0,122 kilograms/sec Source Height: 175 meters

Release Duration: 60 minutes Release Rate: 7,32 kilograms/min Total Amount Released: 439 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

Incendie de 3 cellules de stockage de pneumatiques **Dispersion du formol**

Condition F, vent 3 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: May 9, 2018 1613 hours ST (using computer's clock)

CHEMICAL INFORMATION:

Chemical Name: FORMIC ACID Molecular Weight: 46,03 g/mol

Ambient Boiling Point: 100.2° C

Vapor Pressure at Ambient Temperature: 0.044 atm Ambient Saturation Concentration: 44,376 ppm or 4.44%

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: 0,122 kilograms/sec Source Height: 291 meters

Release Duration: 60 minutes Release Rate: 7,32 kilograms/min Total Amount Released: 439 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

Incendie de 3 cellules de stockage de pneumatiques **Dispersion des fumées d'incendie_Seuils équivalents** Condition A, vent 2 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: May 9, 2018 1615 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: 118973 kilograms/sec Source Height: 437 meters

Release Duration: 60 minutes

Release Rate: 7 140 000 kilograms/min Total Amount Released: 4,28.108 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

Incendie de 3 cellules de stockage de pneumatiques Dispersion des fumées d'incendie_ Seuils équivalents Condition D, vent 5 m/s

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: May 9, 2018 1617 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: 118973 kilograms/sec Source Height: 175 meters

Release Duration: 60 minutes

Release Rate: 7 140 000 kilograms/min Total Amount Released: 4,28.108 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

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

SITE DATA INFORMATION:

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: May 9, 2018 1618 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: 118973 kilograms/sec Source Height: 291 meters

Release Duration: 60 minutes

Release Rate: 7 140 000 kilograms/min Total Amount Released: 4,28.108 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