

Modélisation de la dispersion atmosphérique des  
toxiques en cas d'incendie d'une cellule de  
stockage de produits combustibles

Incendie d'une cellule de stockage  
**Dispersion des suies**  
Condition A, vent 2 m/s

**SITE DATA:**

Location: PERSAN, FRANCE

Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)

Time: May 9, 2018 1348 hours ST (using computer's clock)

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

Wind: 2 meters/second from SW at 3 meters

Ground Roughness: open country      Cloud Cover: 5 tenths

Air Temperature: 20° C

Stability Class: A (user override)

No Inversion Height      Relative Humidity: 50%

**SOURCE STRENGTH:**

Direct Source: 22.09 kilograms/sec      Source Height: 233 meters

Release Duration: 60 minutes

Release Rate: 1 330 kilograms/min

Total Amount Released: 79 992 kilograms

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian

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

Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

Incendie d'une cellule de stockage  
**Dispersion des suies**  
Condition D, vent 5 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)  
Time: May 9, 2018 1352 hours ST (using computer's clock)

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 22.09 kilograms/sec      Source Height: 93 meters  
Release Duration: 60 minutes  
Release Rate: 1 330 kilograms/min  
Total Amount Released: 79 992 kilograms

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (79 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

Incendie d'une cellule de stockage  
**Dispersion des suies**  
Condition F, vent 3 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: May 9, 2018 1355 hours ST (using computer's clock)

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 22.09 kilograms/sec      Source Height: 155 meters  
Release Duration: 60 minutes  
Release Rate: 1 330 kilograms/min  
Total Amount Released: 79 992 kilograms

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (79 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

Incendie d'une cellule de stockage  
**Dispersion du Monoxyde de carbone**  
Condition A, vent 2 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)  
Time: May 9, 2018 1359 hours ST (using computer's clock)

**CHEMICAL DATA:**

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 DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 69,74 kilograms/sec    Source Height: 233 meters  
Release Duration: 60 minutes  
Release Rate: 4 180 kilograms/min  
Total Amount Released: 251 064 kilograms  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (3680 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.  
Orange: LOC is not exceeded --- (920 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC..

**Incendie d'une cellule de stockage**  
**Dispersion du Monoxyde de carbone**  
Condition D, vent 5 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)  
Time: May 9, 2018 1402 hours ST (using computer's clock)

**CHEMICAL DATA:**

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 DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 69,74 kilograms/sec    Source Height: 93 meters  
Release Duration: 60 minutes  
Release Rate: 4 180 kilograms/min  
Total Amount Released: 251 064 kilograms  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (3680 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.  
Orange: LOC is not exceeded --- (920 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

Incendie d'une cellule de stockage  
**Dispersion du Monoxyde de carbone**  
Condition F, vent 3 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: May 9, 2018 1405 hours ST (using computer's clock)

**CHEMICAL DATA:**

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 DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 69,74 kilograms/sec      Source Height: 155 meters  
Release Duration: 60 minutes  
Release Rate: 4 180 kilograms/min  
Total Amount Released: 251 064 kilograms  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (3680 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.  
Orange: LOC is not exceeded --- (920 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

**Incendie d'une cellule de stockage**  
**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 1408 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: 697,4 kilograms/sec      Source Height: 233 meters  
Release Duration: 60 minutes  
Release Rate: 41 800 kilograms/min  
Total Amount Released: 2 510 640 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 d'une cellule de stockage**  
**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 1409 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: 697,4 kilograms/sec   Source Height: 93 meters  
Release Duration: 60 minutes  
Release Rate: 41 800 kilograms/min  
Total Amount Released: 2 510 640 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 d'une cellule de stockage**  
**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 1410 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  
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: 697,4 kilograms/sec      Source Height: 155 meters  
Release Duration: 60 minutes  
Release Rate: 41 800 kilograms/min  
Total Amount Released: 2 510 640 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 d'une cellule de stockage**  
**Dispersion du HCl**  
Condition A, vent 2 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)  
Time: May 9, 2018 1412 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: HYDROGEN CHLORIDE      Molecular Weight: 36.46 g/mol  
AEGL-1 (60 min): 1.8 ppm    AEGL-2 (60 min): 22 ppm    AEGL-3 (60 min): 100 ppm  
IDLH: 50 ppm  
Ambient Boiling Point: -85.3° C  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 26,13 kilograms/sec      Source Height: 233 meters  
Release Duration: 60 minutes  
Release Rate: 1 580 kilograms/min  
Total Amount Released: 94 68 kilograms  
Note: This chemical may flash boil and/or result in two phase flow.

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (358 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.  
Orange: LOC is not exceeded --- (60 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC..

Incendie d'une cellule de stockage  
**Dispersion du HCl**  
Condition D, vent 5 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)  
Time: May 9, 2018 1411 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: HYDROGEN CHLORIDE      Molecular Weight: 36.46 g/mol  
AEGL-1 (60 min): 1.8 ppm    AEGL-2 (60 min): 22 ppm    AEGL-3 (60 min): 100 ppm  
IDLH: 50 ppm  
Ambient Boiling Point: -85.3° C  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 26,13 kilograms/sec      Source Height: 93 meters  
Release Duration: 60 minutes  
Release Rate: 1 580 kilograms/min  
Total Amount Released: 94 68 kilograms  
Note: This chemical may flash boil and/or result in two phase flow.

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (358 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.  
Orange: LOC is not exceeded --- (60 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

Incendie d'une cellule de stockage  
**Dispersion du HCl**  
Condition F, vent 3 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: May 9, 2018 1413 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: HYDROGEN CHLORIDE      Molecular Weight: 36.46 g/mol  
AEGL-1 (60 min): 1.8 ppm    AEGL-2 (60 min): 22 ppm    AEGL-3 (60 min): 100 ppm  
IDLH: 50 ppm  
Ambient Boiling Point: -85.3° C  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 26,13 kilograms/sec      Source Height: 155 meters  
Release Duration: 60 minutes  
Release Rate: 1 580 kilograms/min  
Total Amount Released: 94 68 kilograms  
Note: This chemical may flash boil and/or result in two phase flow.

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (358 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.  
Orange: LOC is not exceeded --- (60 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

Incendie d'une cellule de stockage  
**Dispersion du HCN**  
Condition A, vent 2 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)  
Time: May 9, 2018 1415 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: HYDROGEN CYANIDE      Molecular Weight: 27.03 g/mol  
AEGL-1 (60 min): 2 ppm    AEGL-2 (60 min): 7.1 ppm    AEGL-3 (60 min): 15 ppm  
IDLH: 50 ppm    LEL: 56000 ppm    UEL: 400000 ppm  
Ambient Boiling Point: 25.3° C  
Vapor Pressure at Ambient Temperature: 0.81 atm  
Ambient Saturation Concentration: 815,195 ppm or 81.5%

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 1,65 kilograms/sec      Source Height: 233 meters  
Release Duration: 60 minutes  
Release Rate: 122 kilograms/min  
Total Amount Released: 7 344 kilograms

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (45 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

Incendie d'une cellule de stockage  
**Dispersion du HCN**  
Condition D, vent 5 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)  
Time: May 9, 2018 1416 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: HYDROGEN CYANIDE      Molecular Weight: 27.03 g/mol  
AEGL-1 (60 min): 2 ppm    AEGL-2 (60 min): 7.1 ppm    AEGL-3 (60 min): 15 ppm  
IDLH: 50 ppm    LEL: 56000 ppm    UEL: 400000 ppm  
Ambient Boiling Point: 25.3° C  
Vapor Pressure at Ambient Temperature: 0.81 atm  
Ambient Saturation Concentration: 815,195 ppm or 81.5%

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 1,65 kilograms/sec      Source Height: 93 meters  
Release Duration: 60 minutes  
Release Rate: 122 kilograms/min  
Total Amount Released: 7 344 kilograms

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (45 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

Incendie d'une cellule de stockage  
**Dispersion du HCN**  
Condition F, vent 3 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: May 9, 2018 1418 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: HYDROGEN CYANIDE      Molecular Weight: 27.03 g/mol  
AEGL-1 (60 min): 2 ppm    AEGL-2 (60 min): 7.1 ppm    AEGL-3 (60 min): 15 ppm  
IDLH: 50 ppm    LEL: 56000 ppm    UEL: 400000 ppm  
Ambient Boiling Point: 25.3° C  
Vapor Pressure at Ambient Temperature: 0.81 atm  
Ambient Saturation Concentration: 815,195 ppm or 81.5%

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 1,65 kilograms/sec      Source Height: 155 meters  
Release Duration: 60 minutes  
Release Rate: 122 kilograms/min  
Total Amount Released: 7 344 kilograms

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (45 mg/(cu m))  
Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

**Incendie d'une cellule de stockage**  
**Dispersion des fumées de l'incendie**  
Condition A, vent 2 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)  
Time: May 9, 2018 1421 hours ST (using computer's clock)

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 3154,25 kilograms/sec      Source Height: 233 meters  
Release Duration: 60 minutes  
Release Rate: 191 000 kilograms/min  
Total Amount Released: 11 431 800 kilograms

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red LOC (21705 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 (5568 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 d'une cellule de stockage  
**Dispersion des fumées de l'incendie**  
Condition D, vent 5 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)  
Time: May 9, 2018 1423 hours ST (using computer's clock)

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 3154,25 kilograms/sec      Source Height: 93 meters  
Release Duration: 60 minutes  
Release Rate: 191 000 kilograms/min  
Total Amount Released: 11 431 800 kilograms

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red LOC (21705 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 (5568 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 d'une cellule de stockage**  
**Dispersion des fumées de l'incendie**  
Condition F, vent 3 m/s

**SITE DATA:**

Location: PERSAN, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: May 9, 2018 1425 hours ST (using computer's clock)

**ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)**

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

**SOURCE STRENGTH:**

Direct Source: 3154,25 kilograms/sec      Source Height: 155 meters  
Release Duration: 60 minutes  
Release Rate: 191 000 kilograms/min  
Total Amount Released: 11 431 800 kilograms

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red LOC (21705 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 (5568 mg/(cu m)) Max Threat Zone: LOC is not exceeded  
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.