

**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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)  
Time: March 24, 2020 1514 hours ST (using computer's clock)

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

Wind: 2 meters/second from NE 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: 6.47 kilograms/sec      Source Height: 147 meters  
Release Duration: 60 minutes  
Release Rate: 856 pounds/min  
Total Amount Released: 51,350 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

**THREAT ZONE:**

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: VENNECY, FRANCE

Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)

Time: March 24, 2020 1509 hours ST (using computer's clock)

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

Wind: 5 meters/second from NE 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: 6.47 kilograms/sec      Source Height: 59 meters

Release Duration: 60 minutes

Release Rate: 856 pounds/min

Total Amount Released: 51,350 pounds

Note: This chemical may flash boil and/or result in two phase flow.

Use both dispersion modules to investigate its potential behavior.

**THREAT ZONE:**

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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: March 24, 2020 1511 hours ST (using computer's clock)

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

Wind: 3 meters/second from NE 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: 6.47 kilograms/sec      Source Height: 98 meters  
Release Duration: 60 minutes  
Release Rate: 856 pounds/min  
Total Amount Released: 51,350 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

**THREAT ZONE:**

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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)  
Time: March 24, 2020 1133 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: CARBON MONOXIDE  
CAS Number: 630-8-0                      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: -313.0° F  
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 NE 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: 20.33 kilograms/sec    Source Height: 147 meters  
Release Duration: 60 minutes  
Release Rate: 2,690 pounds/min  
Total Amount Released: 161,352 pounds  
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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)  
Time: March 24, 2020 1130 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: CARBON MONOXIDE  
CAS Number: 630-8-0                      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: -313.0° F  
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 NE 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: 20.33 kilograms/sec      Source Height: 59 meters  
Release Duration: 60 minutes  
Release Rate: 2,690 pounds/min  
Total Amount Released: 161,352 pounds  
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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: March 24, 2020 1132 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: CARBON MONOXIDE  
CAS Number: 630-8-0                      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: -313.0° F  
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 NE 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: 20.33 kilograms/sec    Source Height: 98 meters  
Release Duration: 60 minutes  
Release Rate: 2,690 pounds/min  
Total Amount Released: 161,352 pounds  
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:**

Location: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)  
Time: March 24, 2020 1152 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: CARBON DIOXIDE  
CAS Number: 124-38-9                      Molecular Weight: 44.01 g/mol  
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 DATA: (MANUAL INPUT OF DATA)**

Wind: 2 meters/second from NE 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: 203.29 kilograms/sec    Source Height: 147 meters  
Release Duration: 60 minutes  
Release Rate: 26,900 pounds/min  
Total Amount Released: 1,613,440 pounds

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (89980 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 D, vent 5 m/s

**SITE DATA:**

Location: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)  
Time: March 24, 2020 1155 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: CARBON DIOXIDE  
CAS Number: 124-38-9                      Molecular Weight: 44.01 g/mol  
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 DATA: (MANUAL INPUT OF DATA)**

Wind: 5 meters/second from NE 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: 203.29 kilograms/sec    Source Height: 59 meters  
Release Duration: 60 minutes  
Release Rate: 26,900 pounds/min  
Total Amount Released: 1,613,440 pounds

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (89980 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 F, vent 3 m/s

**SITE DATA:**

Location: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: March 24, 2020 1204 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: CARBON DIOXIDE  
CAS Number: 124-38-9                      Molecular Weight: 44.01 g/mol  
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 DATA: (MANUAL INPUT OF DATA)**

Wind: 3 meters/second from NE 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: 203.29 kilograms/sec    Source Height: 98 meters  
Release Duration: 60 minutes  
Release Rate: 26,900 pounds/min  
Total Amount Released: 1,613,440 pounds

**THREAT ZONE: (GAUSSIAN SELECTED)**

Model Run: Gaussian  
Red : LOC is not exceeded --- (89980 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 A, vent 2 m/s

**SITE DATA:**

Location: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)  
Time: March 24, 2020 1327 hours ST (using computer's clock)

**CHEMICAL DATA:**

Warning: HYDROGEN CHLORIDE can react with water and/or water vapor. This can affect the evaporation rate and downwind dispersion. ALOHA cannot accurately predict the air hazard if this substance comes in contact with water.

Chemical Name: HYDROGEN CHLORIDE  
CAS Number: 7647-1-0                      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: -121.7° F  
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 NE 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: 7.66 kilograms/sec      Source Height: 147 meters  
Release Duration: 60 minutes  
Release Rate: 1,010 pounds/min  
Total Amount Released: 60,795 pounds  
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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)  
Time: March 24, 2020 1329 hours ST (using computer's clock)

**CHEMICAL DATA:**

Warning: HYDROGEN CHLORIDE can react with water and/or water vapor. This can affect the evaporation rate and downwind dispersion. ALOHA cannot accurately predict the air hazard if this substance comes in contact with water.

Chemical Name: HYDROGEN CHLORIDE  
CAS Number: 7647-1-0                      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: -121.7° F  
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 NE 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: 7.66 kilograms/sec      Source Height: 59 meters  
Release Duration: 60 minutes  
Release Rate: 1,010 pounds/min  
Total Amount Released: 60,795 pounds  
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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: March 24, 2020 1331 hours ST (using computer's clock)

**CHEMICAL DATA:**

Warning: HYDROGEN CHLORIDE can react with water and/or water vapor. This can affect the evaporation rate and downwind dispersion. ALOHA cannot accurately predict the air hazard if this substance comes in contact with water.

Chemical Name: HYDROGEN CHLORIDE  
CAS Number: 7647-1-0                      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: -121.7° F  
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 NE 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: 7.66 kilograms/sec      Source Height: 98 meters  
Release Duration: 60 minutes  
Release Rate: 1,010 pounds/min  
Total Amount Released: 60,795 pounds  
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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)  
Time: March 24, 2020 1332 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: HYDROGEN CYANIDE  
CAS Number: 74-90-8                      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: 77.6° F  
Vapor Pressure at Ambient Temperature: 0.81 atm  
Ambient Saturation Concentration: 816,078 ppm or 81.6%

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

Wind: 2 meters/second from NE 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: 0.6 kilograms/sec              Source Height: 147 meters  
Release Duration: 60 minutes  
Release Rate: 79.4 pounds/min  
Total Amount Released: 4,762 pounds

**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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)  
Time: March 24, 2020 1335 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: HYDROGEN CYANIDE  
CAS Number: 74-90-8                      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: 77.6° F  
Vapor Pressure at Ambient Temperature: 0.81 atm  
Ambient Saturation Concentration: 816,078 ppm or 81.6%

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

Wind: 5 meters/second from NE 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: 0.6 kilograms/sec                      Source Height: 59 meters  
Release Duration: 60 minutes  
Release Rate: 79.4 pounds/min  
Total Amount Released: 4,762 pounds

**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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: March 24, 2020 1336 hours ST (using computer's clock)

**CHEMICAL DATA:**

Chemical Name: HYDROGEN CYANIDE  
CAS Number: 74-90-8                      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: 77.6° F  
Vapor Pressure at Ambient Temperature: 0.66 atm  
Ambient Saturation Concentration: 669,267 ppm or 66.9%

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

Wind: 3 meters/second from NE 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: 0.6 kilograms/sec              Source Height: 98 meters  
Release Duration: 60 minutes  
Release Rate: 79.4 pounds/min  
Total Amount Released: 4,762 pounds

**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: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)  
Time: March 24, 2020 1459 hours ST (using computer's clock)

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

Wind: 2 meters/second from NE 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: 926.13 kilograms/sec      Source Height: 147 meters  
Release Duration: 60 minutes  
Release Rate: 123,000 pounds/min  
Total Amount Released: 7,350,362 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

**THREAT ZONE:**

Model Run: Gaussian  
Red : LOC is not exceeded --- (21705 mg/(cu m))  
Note: Threat zone was not drawn because  
the ground level concentrations never exceed the LOC.  
Orange: LOC is not exceeded --- (5568 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 D, vent 5 m/s

**SITE DATA:**

Location: VENNECY, FRANCE

Building Air Exchanges Per Hour: 1.04 (unsheltered single storied)

Time: March 24, 2020 1506 hours ST (using computer's clock)

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

Wind: 5 meters/second from NE 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: 926.13 kilograms/sec      Source Height: 59 meters

Release Duration: 60 minutes

Release Rate: 123,000 pounds/min

Total Amount Released: 7,350,362 pounds

Note: This chemical may flash boil and/or result in two phase flow.

Use both dispersion modules to investigate its potential behavior.

**THREAT ZONE:**

Model Run: Gaussian

Red : LOC is not exceeded --- (21705 mg/(cu m))

Note: Threat zone was not drawn because

the ground level concentrations never exceed the LOC.

Orange: LOC is not exceeded --- (5568 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 F, vent 3 m/s

**SITE DATA:**

Location: VENNECY, FRANCE  
Building Air Exchanges Per Hour: 0.65 (unsheltered single storied)  
Time: March 24, 2020 1515 hours ST (using computer's clock)

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

Wind: 3 meters/second from NE 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: 926.13 kilograms/sec      Source Height: 98 meters  
Release Duration: 60 minutes  
Release Rate: 123,000 pounds/min  
Total Amount Released: 7,350,362 pounds  
Note: This chemical may flash boil and/or result in two phase flow.  
Use both dispersion modules to investigate its potential behavior.

**THREAT ZONE:**

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