

Modélisation de la dispersion atmosphérique des
toxiques en cas d'incendie d'une cellule de
stockage de produits combustibles de 9 000 m²

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

SITE DATA:

Location: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.40 (unsheltered single storied)
Time: March 8, 2019 1031 hours DST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 2 meters/second from SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 20° C
Stability Class: A (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 16.7 kilograms/sec Source Height: 209 meters
Release Duration: 60 minutes
Release Rate: 1,000 kilograms/min
Total Amount Released: 60,001.2 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** --- (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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.98 (unsheltered single storied)
Time: March 8, 2019 1041 hours DST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 5 meters/second from SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 20° C Stability Class: D
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 16.7 kilograms/sec Source Height: 83 meters
Release Duration: 60 minutes
Release Rate: 1,000 kilograms/min
Total Amount Released: 60,001.2 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** --- (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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.62 (unsheltered single storied)
Time: March 8, 2019 1043 hours DST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 3 meters/second from SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 15° C
Stability Class: F (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 16.7 kilograms/sec Source Height: 139 meters
Release Duration: 60 minutes
Release Rate: 1,000 kilograms/min
Total Amount Released: 60,001.2 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** --- (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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.40 (unsheltered single storied)
Time: March 8, 2019 0943 hours DST (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: -191.5° 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: urban or forest Cloud Cover: 5 tenths
Air Temperature: 20° C
Stability Class: A (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 52.3 kilograms/sec Source Height: 209 meters
Release Duration: 60 minutes
Release Rate: 3,140 kilograms/min
Total Amount Released: 188,280 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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.98 (unsheltered single storied)
Time: March 8, 2019 1018 hours DST (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: -191.5° 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: urban or forest Cloud Cover: 5 tenths
Air Temperature: 20° C
Stability Class: D (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 52.3 kilograms/sec Source Height: 83 meters
Release Duration: 60 minutes
Release Rate: 3,140 kilograms/min
Total Amount Released: 188,280 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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.62 (unsheltered single storied)
Time: March 8, 2019 1022 hours DST (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: -191.5° 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: urban or forest Cloud Cover: 5 tenths
Air Temperature: 15° C
Stability Class: F (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 52.3 kilograms/sec Source Height: 139 meters
Release Duration: 60 minutes
Release Rate: 3,140 kilograms/min
Total Amount Released: 188,280 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:

Location: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.40 (unsheltered single storied)
Time: March 8, 2019 1045 hours DST (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 SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 20° C
Stability Class: A (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 523 kilograms/sec Source Height: 209 meters
Release Duration: 60 minutes
Release Rate: 31,400 kilograms/min
Total Amount Released: 1,882,980 kilograms

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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.98 (unsheltered single storied)
Time: March 8, 2019 1049 hours DST (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 SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 20° C Stability Class: D
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 523 kilograms/sec Source Height: 83 meters
Release Duration: 60 minutes
Release Rate: 31,400 kilograms/min
Total Amount Released: 1,882,980 kilograms

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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.62 (unsheltered single storied)
Time: March 8, 2019 1050 hours DST (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 SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 15° C
Stability Class: F (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 523 kilograms/sec Source Height: 139 meters
Release Duration: 60 minutes
Release Rate: 31,400 kilograms/min
Total Amount Released: 1,882,980 kilograms

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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.40 (unsheltered single storied)
Time: March 8, 2019 1052 hours DST (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: -85.0° 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: urban or forest Cloud Cover: 5 tenths

Air Temperature: 20° C

Stability Class: A (user override)

No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 19.7 kilograms/sec Source Height: 209 meters

Release Duration: 60 minutes

Release Rate: 1,180 kilograms/min

Total Amount Released: 70,956 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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.98 (unsheltered single storied)
Time: March 8, 2019 1054 hours DST (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: -85.0° 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: urban or forest Cloud Cover: 5 tenths

Air Temperature: 20° C

Stability Class: D

No Inversion Height

Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 19.7 kilograms/sec Source Height: 83 meters

Release Duration: 60 minutes

Release Rate: 1,180 kilograms/min

Total Amount Released: 70,956 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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.62 (unsheltered single storied)
Time: March 8, 2019 1055 hours DST (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: -85.0° 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: urban or forest Cloud Cover: 5 tenths

Air Temperature: 15° C

Stability Class: F (user override)

No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 19.7 kilograms/sec Source Height: 139 meters

Release Duration: 60 minutes

Release Rate: 1,180 kilograms/min

Total Amount Released: 70,956 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))

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

SITE DATA:

Location: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.40 (unsheltered single storied)
Time: March 8, 2019 1140 hours DST (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: 25.5° C
Vapor Pressure at Ambient Temperature: 0.81 atm
Ambient Saturation Concentration: 809,371 ppm or 80.9%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 2 meters/second from SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 20° C
Stability Class: A (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 1.5 kilograms/sec Source Height: 209 meters
Release Duration: 60 minutes
Release Rate: 91.8 kilograms/min
Total Amount Released: 5,508 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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.98 (unsheltered single storied)
Time: March 8, 2019 1144 hours DST (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: 25.5° C
Vapor Pressure at Ambient Temperature: 0.81 atm
Ambient Saturation Concentration: 809,371 ppm or 80.9%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 5 meters/second from SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 20° C Stability Class: D
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 1.5 kilograms/sec Source Height: 83 meters
Release Duration: 60 minutes
Release Rate: 91.8 kilograms/min
Total Amount Released: 5,508 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: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.62 (unsheltered single storied)
Time: March 8, 2019 1145 hours DST (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: 25.5° C
Vapor Pressure at Ambient Temperature: 0.66 atm
Ambient Saturation Concentration: 663,766 ppm or 66.4%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 3 meters/second from SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 15° C
Stability Class: F (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 1.53 kilograms/sec Source Height: 139 meters
Release Duration: 60 minutes
Release Rate: 91.8 kilograms/min
Total Amount Released: 5,508 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 (seuil équivalent)
Condition A, vent 2 m/s

SITE DATA:

Location: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.40 (unsheltered single storied)
Time: March 8, 2019 1147 hours DST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 2 meters/second from SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 20° C
Stability Class: A (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 225 kilograms/sec Source Height: 209 meters
Release Duration: 60 minutes
Release Rate: 13,500 kilograms/min
Total Amount Released: 810,000 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** --- (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 (seuil équivalent)
Condition D, vent 5 m/s

SITE DATA:

Location: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.98 (unsheltered single storied)
Time: March 8, 2019 1149 hours DST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 5 meters/second from SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 20° C Stability Class: D
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 225 kilograms/sec Source Height: 83 meters
Release Duration: 60 minutes
Release Rate: 13,500 kilograms/min
Total Amount Released: 810,000 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** --- (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 (seuil équivalent)
Condition F, vent 3 m/s

SITE DATA:

Location: HEUDEBOUVILLE, FRANCE
Building Air Exchanges Per Hour: 0.62 (unsheltered single storied)
Time: March 8, 2019 1150 hours DST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 3 meters/second from SW at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 15° C
Stability Class: F (user override)
No Inversion Height Relative Humidity: 75%

SOURCE STRENGTH:

Direct Source: 225 kilograms/sec Source Height: 139 meters
Release Duration: 60 minutes
Release Rate: 13,500 kilograms/min
Total Amount Released: 810,000 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** --- (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.