

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

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

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1349 hours ST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: **2 meters/second** from W 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: 66.69 kilograms/sec **Source Height: 358 meters**
Release Duration: 60 minutes
Release Rate: 4,000 kilograms/min
Total Amount Released: 240,084 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 de trois cellules de stockage
Dispersion des suies
Condition D, vent 5 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1350 hours ST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: **5 meters/second** from W 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: 66.69 kilograms/sec **Source Height: 143 meters**
Release Duration: 60 minutes
Release Rate: 4,000 kilograms/min
Total Amount Released: 240,084 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 de trois cellules de stockage
Dispersion des suies
Condition F, vent 3 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1352 hours ST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: **3 meters/second** from W 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: 66.69 kilograms/sec **Source Height: 239 meters**
Release Duration: 60 minutes
Release Rate: 4,000 kilograms/min
Total Amount Released: 240,084 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 de trois cellules de stockage
Dispersion du Monoxyde de carbone
Condition A, vent 2 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1354 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: -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 W 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: 209.22 kilograms/sec Source Height: 358 meters
Release Duration: 60 minutes
Release Rate: 12,600 kilograms/min
Total Amount Released: 753,192 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 de trois cellules de stockage
Dispersion du Monoxyde de carbone
Condition D, vent 5 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1356 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: -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 W 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: 209.22 kilograms/sec Source Height: 143 meters
Release Duration: 60 minutes
Release Rate: 12,600 kilograms/min
Total Amount Released: 753,192 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 de trois cellules de stockage
Dispersion du Monoxyde de carbone
Condition F, vent 3 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1358 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: -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 W 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: 209.22 kilograms/sec Source Height: 239 meters
Release Duration: 60 minutes
Release Rate: 12,600 kilograms/min
Total Amount Released: 753,192 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 de 3 cellules de stockage
Dispersion du Dioxyde de carbone
Condition A, vent 2 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1401 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 W 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: 2092.19 kilograms/sec **Source Height: 358 meters**
Release Duration: 60 minutes
Release Rate: 126,000 kilograms/min
Total Amount Released: 7,531,884 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 de 3 cellules de stockage
Dispersion du Dioxyde de carbone
Condition D, vent 5 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1402 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 W 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: 2092.19 kilograms/sec **Source Height: 143 meters**
Release Duration: 60 minutes
Release Rate: 126,000 kilograms/min
Total Amount Released: 7,531,884 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 de 3 cellules de stockage
Dispersion du Dioxyde de carbone
Condition F, vent 3 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1403 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 W 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: 2092.19 kilograms/sec **Source Height: 239 meters**
Release Duration: 60 minutes
Release Rate: 126,000 kilograms/min
Total Amount Released: 7,531,884 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 de trois cellules de stockage
Dispersion du HCl
Condition A, vent 2 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1405 hours ST (using computer's clock)

CHEMICAL DATA:

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 W 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: 78.84 kilograms/sec **Source Height: 358 meters**
Release Duration: 60 minutes
Release Rate: 4,730 kilograms/min
Total Amount Released: 283,824 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 de trois cellules de stockage
Dispersion du HCl
Condition D, vent 5 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1406 hours ST (using computer's clock)

CHEMICAL DATA:

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 W 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: 78.84 kilograms/sec **Source Height: 143 meters**
Release Duration: 60 minutes
Release Rate: 4,730 kilograms/min
Total Amount Released: 283,824 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 de trois cellules de stockage
Dispersion du HCl
Condition F, vent 3 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1408 hours ST (using computer's clock)

CHEMICAL DATA:

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 W 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: 78.84 kilograms/sec **Source Height: 239 meters**
Release Duration: 60 minutes
Release Rate: 4,730 kilograms/min
Total Amount Released: 283,824 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 de trois cellules de stockage
Dispersion du HCN
Condition A, vent 2 m/s

SITE DATA:

Location: MER, FRANCE

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

Time: May 4, 2020 1410 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: 25.7° C

Vapor Pressure at Ambient Temperature: 0.81 atm

Ambient Saturation Concentration: 806,532 ppm or 80.7%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 2 meters/second from W 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: 6.12 kilograms/sec Source Height: 358 meters

Release Duration: 60 minutes

Release Rate: 367 kilograms/min

Total Amount Released: 22,032 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 de trois cellules de stockage
Dispersion du HCN
Condition D, vent 5 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1411 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: 25.7° C
Vapor Pressure at Ambient Temperature: 0.81 atm
Ambient Saturation Concentration: 806,532 ppm or 80.7%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: **5 meters/second** from W 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: 6.12 kilograms/sec **Source Height: 143 meters**
Release Duration: 60 minutes
Release Rate: 367 kilograms/min
Total Amount Released: 22,032 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 de trois cellules de stockage
Dispersion du HCN
Condition F, vent 3 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1412 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: 25.7° C
Vapor Pressure at Ambient Temperature: 0.66 atm
Ambient Saturation Concentration: 661,437 ppm or 66.1%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: **3 meters/second** from W 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: 6.12 kilograms/sec **Source Height: 239 meters**
Release Duration: 60 minutes
Release Rate: 367 kilograms/min
Total Amount Released: 22,032 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 de trois cellules de stockage
Dispersion des fumées de l'incendie (seuil équivalent)
Condition A, vent 2 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1413 hours ST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: **2 meters/second** from W 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: 9526.6 kilograms/sec **Source Height: 358 meters**
Release Duration: 60 minutes
Release Rate: 572,000 kilograms/min
Total Amount Released: 34,295,760 kilograms

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 de trois cellules de stockage
Dispersion des fumées de l'incendie (seuil équivalent)
Condition D, vent 5 m/s

SITE DATA:

Location: MER, FRANCE

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

Time: May 4, 2020 1415 hours ST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: **5 meters/second** from W 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: 9526.6 kilograms/sec Source Height: 143 meters

Release Duration: 60 minutes

Release Rate: 572,000 kilograms/min

Total Amount Released: 34,295,760 kilograms

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 de trois cellules de stockage
Dispersion des fumées de l'incendie (seuil équivalent)
Condition F, vent 3 m/s

SITE DATA:

Location: MER, FRANCE
Building Air Exchanges Per Hour: 0.42 (unsheltered single storied)
Time: May 4, 2020 1416 hours ST (using computer's clock)

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: **3 meters/second** from W 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: 9526.6 kilograms/sec **Source Height: 239 meters**
Release Duration: 60 minutes
Release Rate: 572,000 kilograms/min
Total Amount Released: 34,295,760 kilograms

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.