Modélisation de la dispersion atmosphérique des toxiques

	Condition A, vent 2 m/s	Condition D, vent 5 m/s	Condition F, vent 3 m/s
Suies	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: MAY 10, 2022 1044 hours DST (using computer's clock) ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 2 meters/second from SSW 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: 31,89 kilograms/sec Source Height: 229 meters Release Duration: 60 minutes Release Rate: 1913,4 kilograms/min Total Amount Released: 114804 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.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: MAY 10, 2022 1044 hours DST (using computer's clock) ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 5 meters/second from SSW 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: 31,89 kilograms/sec Source Height: 91 meters Release Duration: 60 minutes Release Rate: 1913,4 kilograms/min Total Amount Released: 114804 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.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: MAY 10, 2022 1045 hours DST (using computer's clock) ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 3 meters/second from SSW 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: 31,89 kilograms/sec Source Height: 152 meters Release Duration: 60 minutes Release Rate: 1913,4 kilograms/min Total Amount Released: 114804 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.

	Condition A, vent 2 m/s	Condition D, vent 5 m/s	Condition F, vent 3 m/s
CO	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: MAY 10, 2022 1045 hours DST (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: -191.5° 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 SSW 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: 15,47 kilograms/sec Source Height: 229 meters Release Duration: 60 minutes Release Rate: 928,2 kilograms/min Total Amount Released: 55692 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: Footprint was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: MAY 10, 2022 1045 hours DST (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: -191.5° 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 SSW 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: 15,47 kilograms/sec Source Height: 91 meters Release Duration: 60 minutes Release Rate: 928,2 kilograms/min Total Amount Released: 55692 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: Footprint was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: MAY 10, 2022 1046 hours DST (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: -191.5° 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 SSW 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: 15,47 kilograms/sec Source Height: 152 meters Release Duration: 60 minutes Release Rate: 928,2 kilograms/min Total Amount Released: 55692 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: Footprint was not drawn because the ground level concentrations never exceed the LOC.

	Condition A, vent 2 m/s	Condition D, vent 5 m/s	Condition F, vent 3 m/s
CO_2	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: MAY 10, 2022 1046 hours DST (using computer's clock) CHEMICAL DATA: 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 DATA: (MANUAL INPUT OF DATA) Wind: 2 meters/second from SSW 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: 412,45 kilograms/sec Source Height: 229 meters Release Duration: 60 minutes Release Rate: 24747 kilograms/min Total Amount Released: 1484820 kilograms THREAT ZONE: (GAUSSIAN SELECTED) Model Run: Gaussian Red : LOC is not exceeded --- (89980 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: MAY 10, 2022 1047 hours DST (using computer's clock) CHEMICAL DATA: 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 DATA: (MANUAL INPUT OF DATA) Wind: 5 meters/second from SSW 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: 412,45 kilograms/sec Source Height: 91 meters Release Duration: 60 minutes Release Rate: 24747 kilograms/min Total Amount Released: 1484820 kilograms THREAT ZONE: (GAUSSIAN SELECTED) Model Run: Gaussian Red : LOC is not exceeded --- (89980 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: MAY 10, 2022 1048 hours DST (using computer's clock) CHEMICAL DATA: 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 DATA: (MANUAL INPUT OF DATA) Wind: 3 meters/second from SSW 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: 412,45 kilograms/sec Source Height: 152 meters Release Duration: 60 minutes Release Rate: 24747 kilograms/min Total Amount Released: 1484820 kilograms THREAT ZONE: (GAUSSIAN SELECTED) Model Run: Gaussian Red : LOC is not exceeded --- (89980 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

	Condition A, vent 2 m/s	Condition D, vent 5 m/s	Condition F, vent 3 m/s
SO_2	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: MAY 10, 2022 1048 hours DST (using computer's clock) CHEMICAL DATA: Chemical Name: SULFUR DIOXIDE Molecular Weight: 64.06 g/mol ERPG-3: 15 ppm ERPG-2: 3 ppm ERPG-1: 0.3 ppm IDLH: 100 ppm Carcinogenic risk - see CAMEO Normal Boiling Point: -10.0°C Ambient Boiling Point: -10.2° 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 SSW 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: 2,09 kilograms/sec Source Height: 229 meters Release Duration: 60 minutes Release Rate: 125,4 kilograms/min Total Amount Released: 7524 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 --- (1885 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (211 mg/(cu m)) Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: MAY 10, 2022 1048 hours DST (using computer's clock) CHEMICAL DATA: Chemical Name: SULFUR DIOXIDE Molecular Weight: 64.06 g/mol ERPG-3: 15 ppm ERPG-2: 3 ppm ERPG-1: 0.3 ppm IDLH: 100 ppm Carcinogenic risk - see CAMEO Normal Boiling Point: -10.0°C Ambient Boiling Point: -10.2° 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 SSW 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: 2,09 kilograms/sec Source Height: 91 meters Release Duration: 60 minutes Release Rate: 125,4 kilograms/min Total Amount Released: 7524 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 --- (1885 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (211 mg/(cu m)) Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: MAY 10, 2022 1049 hours DST (using computer's clock) CHEMICAL DATA: Chemical Name: SULFUR DIOXIDE Molecular Weight: 64.06 g/mol ERPG-3: 15 ppm ERPG-2: 3 ppm ERPG-1: 0.3 ppm IDLH: 100 ppm Carcinogenic risk - see CAMEO Normal Boiling Point: -10.0°C Ambient Boiling Point: -10.2° 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 SSW 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: 2,09 kilograms/sec Source Height: 152 meters Release Duration: 60 minutes Release Rate: 125,4 kilograms/min Total Amount Released: 7524 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 --- (1885 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (211 mg/(cu m)) Note: Threat zone was not drawn because the ground level concentrations never exceed the LOC.

	Condition A, vent 2 m/s	Condition D, vent 5 m/s	Condition F, vent 3 m/s
NO_2	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: MAY 10, 2022 1049 hours DST (using computer's clock) CHEMICAL DATA: Chemical Name: NITROGEN DIOXIDE Molecular Weight: 46.01 g/mol TEEL-3: 30 ppm TEEL-2 : 15 ppm TEEL-1 : 2 ppm IDLH: 20 ppm Normal Boiling Point: 21.0°C Ambient Boiling Point: 20.9° C Vapor Pressure at Ambient Temperature: 0.95 atm Ambient Saturation Concentration: 958,041 ppm or 95.8% ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 2 meters/second from SSW 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: 229 meters Release Duration: 60 minutes Release Rate: 36 kilograms/min Total Amount Released: 2160 kilograms THREAT ZONE: (GAUSSIAN SELECTED) Model Run: Gaussian Red : LOC is not exceeded --- (132 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (75 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: MAY 10, 2022 1049 hours DST (using computer's clock) CHEMICAL DATA: Chemical Name: NITROGEN DIOXIDE Molecular Weight: 46.01 g/mol TEEL-3: 30 ppm TEEL-2 : 15 ppm TEEL-1 : 2 ppm IDLH: 20 ppm Normal Boiling Point: 21.0°C Ambient Boiling Point: 20.9° C Vapor Pressure at Ambient Temperature: 0.95 atm Ambient Saturation Concentration: 958,041 ppm or 95.8% ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 5 meters/second from SSW 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: 91 meters Release Duration: 60 minutes Release Rate: 36 kilograms/min Total Amount Released: 2160 kilograms THREAT ZONE: (GAUSSIAN SELECTED) Model Run: Gaussian Red : LOC is not exceeded --- (132 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (75 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: MAY 10, 2022 1050 hours DST (using computer's clock) CHEMICAL DATA: Chemical Name: NITROGEN DIOXIDE Molecular Weight: 46.01 g/mol TEEL-3: 30 ppm TEEL-2 : 15 ppm TEEL-1 : 2 ppm IDLH: 20 ppm Normal Boiling Point: 21.0°C Ambient Boiling Point: 20.9° C Vapor Pressure at Ambient Temperature: 0.95 atm Ambient Saturation Concentration: 958,041 ppm or 95.8% ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 3 meters/second from SSW 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: 152 meters Release Duration: 60 minutes Release Rate: 36 kilograms/min Total Amount Released: 2160 kilograms THREAT ZONE: (GAUSSIAN SELECTED) Model Run: Gaussian Red : LOC is not exceeded --- (132 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (75 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

	Condition A, vent 2 m/s	Condition D, vent 5 m/s	Condition F, vent 3 m/s
Formol	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: MAY 10, 2022 1051 hours DST (using computer's clock) CHEMICAL DATA: Chemical Name: FORMIC ACID Molecular Weight: 46.03 g/mol TEEL-3: 30 ppm TEEL-2 : 10 ppm TEEL-1 : 10 ppm IDLH: 50 ppmf Normal Boiling Point: 100.6° C Ambient Boiling Point : 100.3°C Vapor Pressure at Ambient Temperature: 0.044 atm Ambient Saturation Concentration: 44,317 ppm or 4.43% ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 2 meters/second from SSW 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: 0,02 kilograms/sec Source Height: 229 meters Release Duration: 60 minutes Release Rate: 1,2 kilograms/min Total Amount Released: 72 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 --- (31 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (12 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: MAY 10, 2022 1051 hours DST (using computer's clock) CHEMICAL DATA: Chemical Name: FORMIC ACID Molecular Weight: 46.03 g/mol TEEL-3: 30 ppm TEEL-2 : 10 ppm TEEL-1 : 10 ppm IDLH: 50 ppmf Normal Boiling Point: 100.6° C Ambient Boiling Point : 100.3°C Vapor Pressure at Ambient Temperature: 0.044 atm Ambient Saturation Concentration: 44,317 ppm or 4.43% ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 5 meters/second from SSW 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: 0,02 kilograms/sec Source Height: 91 meters Release Duration: 60 minutes Release Rate: 1,2 kilograms/min Total Amount Released: 72 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 --- (31 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (12 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: MAY 10, 2022 1051 hours DST (using computer's clock) CHEMICAL DATA: Chemical Name: FORMIC ACID Molecular Weight: 46.03 g/mol TEEL-3: 30 ppm TEEL-2 : 10 ppm TEEL-1 : 10 ppm IDLH: 50 ppmf Normal Boiling Point: 100.6° C Ambient Boiling Point : 100.3°C Vapor Pressure at Ambient Temperature: 0.044 atm Ambient Saturation Concentration: 44,317 ppm or 4.43% ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 3 meters/second from SSW 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: 0,02 kilograms/sec Source Height: 152 meters Release Duration: 60 minutes Release Rate: 1,2 kilograms/min Total Amount Released: 72 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 --- (31 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (12 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

	Condition A, vent 2 m/s	Condition D, vent 5 m/s	Condition F, vent 3 m/s
Fumées	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.42 (unsheltered single storied) Time: MAY 10, 2022 1052 hours DST (using computer's clock) ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 2 meters/second from SSW 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: 476,6 kilograms/sec Source Height: 229 meters Release Duration: 60 minutes Release Rate: 28596 kilograms/min Total Amount Released: 1715760 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 --- (31018 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (11346 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 1.04 (unsheltered single storied) Time: MAY 10, 2022 1052 hours DST (using computer's clock) ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 5 meters/second from SSW 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: 476,6 kilograms/sec Source Height: 91 meters Release Duration: 60 minutes Release Rate: 28596 kilograms/min Total Amount Released: 1715760 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 --- (31018 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (11346 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.	SITE DATA: Location: BOIGNY-SUR-BIONNE, FRANCE Building Air Exchanges Per Hour: 0.61 (unsheltered single storied) Time: MAY 10, 2022 1052 hours DST (using computer's clock) ATMOSPHERIC DATA: (MANUAL INPUT OF DATA) Wind: 3 meters/second from SSW at 3 meters Ground Roughness: open country Cloud Cover: 5 tenths Air Temperature: 15° C Stability Class: E (user override) No Inversion Height Relative Humidity: 50% SOURCE STRENGTH: Direct Source: 476,6 kilograms/sec Source Height: 152 meters Release Duration: 60 minutes Release Rate: 28596 kilograms/min Total Amount Released: 1715760 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 --- (31018 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange: LOC is not exceeded --- (11346 mg/(cu m)) Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.