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

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

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1445 hours ST (using computer's clock) ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 2 meters/sec from SW at 3 meters

No Inversion Height Stability Class: A (user override) Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths

SOURCE STRENGTH INFORMATION: **Direct Source: 82 kilograms/sec** Source Height: 332 meters Release Duration: 60 minutes Release Rate: 4,980 kilograms/min Total Amount Released: 298,836 kilograms

FOOTPRINT INFORMATION: Dispersion Module: Gaussian Yellow LOC (79 mg/(cu m)) Max Threat Zone: **LOC is not exceeded** Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage Dispersion des suies Condition D, vent 5 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1446 hours ST (using computer's clock) ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 5 meters/sec from SW at 3 meters No Inversion Height Stability Class: D Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 82 kilograms/sec Source Height: 133 meters Release Duration: 60 minutes Release Rate: 4,980 kilograms/min Total Amount Released: 298,836 kilograms FOOTPRINT INFORMATION: **Dispersion Module: Gaussian** Yellow LOC (79 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage Dispersion des suies Condition F, vent 3 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1448 hours ST (using computer's clock) ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 3 meters/sec from SW at 3 meters No Inversion Height Stability Class: F (user override) Air Temperature: 15° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 82 kilograms/sec Source Height: 221 meters Release Duration: 60 minutes Release Rate: 4,980 kilograms/min Total Amount Released: 298,836 kilograms FOOTPRINT INFORMATION:

Dispersion Module: Gaussian Yellow LOC (79 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage Dispersion du Monoxyde de carbone Condition A, vent 2 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1452 hours ST (using computer's clock) CHEMICAL INFORMATION: Chemical Name: CARBON MONOXIDE Molecular Weight: 28.01 g/mol ERPG-3: 500 ppm ERPG-2: 350 ppm ERPG-1: 200 ppm IDLH: 1200 ppm Normal Boiling Point: -191.5° C Ambient Boiling Point: -191.7° C Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1,000,000 ppm or 100.0% ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 2 meters/sec from SW at 3 meters No Inversion Height Stability Class: A (user override) Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 39.8 kilograms/sec Source Height: 332 meters Release Duration: 60 minutes Release Rate: 2,420 kilograms/min Total Amount Released: 144,972 kilograms Note: This chemical may flash boil and/or result in two phase flow. Use both dispersion modules to investigate its potential behavior. FOOTPRINT INFORMATION: **Dispersion Module: Gaussian** Red LOC (3680 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (920 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage Dispersion du Monoxyde de carbone Condition D, vent 5 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1453 hours ST (using computer's clock) CHEMICAL INFORMATION: Chemical Name: CARBON MONOXIDE Molecular Weight: 28.01 g/mol ERPG-3: 500 ppm ERPG-2: 350 ppm ERPG-1: 200 ppm IDLH: 1200 ppm Normal Boiling Point: -191.5° C Ambient Boiling Point: -191.7° C Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1,000,000 ppm or 100.0% ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 5 meters/sec from SW at 3 meters No Inversion Height Stability Class: D Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 39.8 kilograms/sec Source Height: 133 meters Release Duration: 60 minutes Release Rate: 2,420 kilograms/min Total Amount Released: 144,972 kilograms Note: This chemical may flash boil and/or result in two phase flow. Use both dispersion modules to investigate its potential behavior. FOOTPRINT INFORMATION: **Dispersion Module: Gaussian** Red LOC (3680 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (920 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage Dispersion du Monoxyde de carbone Condition F, vent 3 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1455 hours ST (using computer's clock) CHEMICAL INFORMATION: Chemical Name: CARBON MONOXIDE Molecular Weight: 28.01 g/mol ERPG-3: 500 ppm ERPG-2: 350 ppm ERPG-1: 200 ppm IDLH: 1200 ppm Normal Boiling Point: -191.5° C Ambient Boiling Point: -191.7° C Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1,000,000 ppm or 100.0% ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 3 meters/sec from SW at 3 meters No Inversion Height Stability Class: F (user override) Air Temperature: 15° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 39.8 kilograms/sec Source Height: 221 meters Release Duration: 60 minutes Release Rate: 2,420 kilograms/min Total Amount Released: 144,972 kilograms Note: This chemical may flash boil and/or result in two phase flow. Use both dispersion modules to investigate its potential behavior. FOOTPRINT INFORMATION: **Dispersion Module: Gaussian** Red LOC (3680 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (920 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage Dispersion du Dioxyde de carbone Condition A, vent 2 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1502 hours ST (using computer's clock) CHEMICAL INFORMATION: Chemical Name: CARBON DIOXIDE Molecular Weight: 44.01 g/mol TEEL-3: 40000 ppm TEEL-2: 30000 ppm TEEL-1: 30000 ppm IDLH: 40000 ppm Normal Boiling Point: -unavail-Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1,000,000 ppm or 100.0% Note: Not enough chemical data to use Heavy Gas option ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 2 meters/sec from SW at 3 meters No Inversion Height Stability Class: A (user override) Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 1060.61 kilograms/sec Source Height: 332 meters Release Duration: 60 minutes Release Rate: 64,400 kilograms/min Total Amount Released: 3,864,996 kilograms FOOTPRINT INFORMATION: (GAUSS SELECTED) **Dispersion Module: Gaussian** Red LOC (89980 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage Dispersion du Dioxyde de carbone Condition D, vent 5 m/s

	SITE DATA INFORMATION:		
Location: POUPRY, FRANCE			
	Building Air Exchanges Per Hour: 0.32 (sheltered single storied)		
	Time: March 19, 2018 1504 hours ST (using computer's clock)		
CHEMICAL INFORMATION:			
	Chemical Name: CARBON DIOXIDE Molecular Weight: 44.01 g/mol		
TEEL-3: 40000 ppm TEEL-2: 30000 ppm TEEL-1: 30000 ppm			
IDLH: 40000 ppm			
Normal Boiling Point: -unavail-			
Vapor Pressure at Ambient Temperature: greater than 1 atm			
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%			
	Note: Not enough chemical data to use Heavy Gas option		
	ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA)		
Wind: 5 meters/sec from SW at 3 meters No Inversion Height			
			Stability Class: D Air Temperature: 20° C
	Relative Humidity: 50% Ground Roughness: open country		
	Cloud Cover: 5 tenths		
	SOURCE STRENGTH INFORMATION:		
	Direct Source: 1060.61 kilograms/sec Source Height: 133 meters		
Release Duration: 60 minutes Release Rate: 64,400 kilograms/min			
		Total Amount Released: 3,864,996 kilograms	
FOOTPRINT INFORMATION: (GAUSS SELECTED)			
Dispersion Module: Gaussian			
Red LOC (89980 mg/(cu m)) Max Threat Zone: LOC is not exceeded			
	Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.		

Incendie de trois cellules de stockage Dispersion du Dioxyde de carbone Condition F, vent 3 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1505 hours ST (using computer's clock) CHEMICAL INFORMATION: Chemical Name: CARBON DIOXIDE Molecular Weight: 44.01 g/mol TEEL-3: 40000 ppm TEEL-2: 30000 ppm TEEL-1: 30000 ppm IDLH: 40000 ppm Normal Boiling Point: -unavail-Vapor Pressure at Ambient Temperature: greater than 1 atm Ambient Saturation Concentration: 1,000,000 ppm or 100.0% Note: Not enough chemical data to use Heavy Gas option ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 3 meters/sec from SW at 3 meters No Inversion Height Stability Class: F (user override) Air Temperature: 15° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 1060.61 kilograms/sec Source Height: 221 meters Release Duration: 60 minutes Release Rate: 64,400 kilograms/min Total Amount Released: 3,864,996 kilograms FOOTPRINT INFORMATION: (GAUSS SELECTED) **Dispersion Module: Gaussian** Red LOC (89980 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage Dispersion du SO₂ Condition A, vent 2 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1506 hours ST (using computer's clock) CHEMICAL INFORMATION: 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 INFORMATION: (MANUAL INPUT OF DATA) Wind: 2 meters/sec from SW at 3 meters No Inversion Height Stability Class: A (user override) Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 5.37 kilograms/sec Source Height: 332 meters Release Duration: 60 minutes Release Rate: 327 kilograms/min Total Amount Released: 19,620 kilograms Note: This chemical may flash boil and/or result in two phase flow. FOOTPRINT INFORMATION: (GAUSS SELECTED) **Dispersion Module: Gaussian** Red LOC (1885 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (211 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage Dispersion du SO₂ Condition D, vent 5 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1507 hours ST (using computer's clock) CHEMICAL INFORMATION: 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 INFORMATION: (MANUAL INPUT OF DATA) Wind: 5 meters/sec from SW at 3 meters No Inversion Height Stability Class: D Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 5.37 kilograms/sec Source Height: 133 meters Release Duration: 60 minutes Release Rate: 327 kilograms/min Total Amount Released: 19,620 kilograms Note: This chemical may flash boil and/or result in two phase flow. FOOTPRINT INFORMATION: (GAUSS SELECTED) **Dispersion Module: Gaussian** Red LOC (1885 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (211 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage Dispersion du SO₂ Condition F, vent 3 m/s

SITE DATA INFORMATION:		
Location: POUPRY, FRANCE		
Building Air Exchanges Per Hour: 0.32 (sheltered single storied)		
Time: March 19, 2018 1508 hours ST (using computer's clock)		
CHEMICAL INFORMATION:		
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 INFORMATION: (MANUAL INPUT OF DATA)		
Wind: 3 meters/sec from SW at 3 meters		
No Inversion Height		
Stability Class: F (user override) Air Temperature: 20° C		
Relative Humidity: 50% Ground Roughness: open country		
Cloud Cover: 5 tenths		
SOURCE STRENGTH INFORMATION:		
Direct Source: 5.37 kilograms/sec Source Height: 221 meters		
Release Duration: 60 minutes		
Release Rate: 327 kilograms/min		
Total Amount Released: 19,620 kilograms Note: This chemical may flash boil and/or result in two phase flow		
Note. This chemical may hash boll and/or result in two phase now		
FOOTPRINT INFORMATION: (GAUSS SELECTED)		
Dispersion Module: Gaussian		
Red LOC (1885 mg/(cu m)) Max Threat Zone: LOC is not exceeded		
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.		
Orange LOC (211 mg/(cu m)) Max Threat Zone: LOC is not exceeded		
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.		

Incendie de trois cellules de stockage Dispersion du NO₂

Condition A, vent 2 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1512 hours ST (using computer's clock) CHEMICAL INFORMATION: 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 INFORMATION: (MANUAL INPUT OF DATA) Wind: 2 meters/sec from SW at 3 meters No Inversion Height Stability Class: A (user override) Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 1.55 kilograms/sec Source Height: 332 meters Release Duration: 60 minutes Release Rate: 93 kilograms/min Total Amount Released: 5,580 kilograms FOOTPRINT INFORMATION: (GAUSS SELECTED) **Dispersion Module: Gaussian** Red LOC (132 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (75 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage Dispersion du NO₂ Condition D, vent 5 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1514 hours ST (using computer's clock) CHEMICAL INFORMATION: 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 INFORMATION: (MANUAL INPUT OF DATA) Wind: 5 meters/sec from SW at 3 meters No Inversion Height Stability Class: D Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 1.55 kilograms/sec Source Height: 133 meters Release Duration: 60 minutes Release Rate: 93 kilograms/min Total Amount Released: 5,580 kilograms FOOTPRINT INFORMATION: (GAUSS SELECTED) **Dispersion Module: Gaussian** Red LOC (132 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (75 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage Dispersion du NO₂

Condition F, vent 3 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1516 hours ST (using computer's clock) CHEMICAL INFORMATION: 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 INFORMATION: (MANUAL INPUT OF DATA) Wind: 3 meters/sec from SW at 3 meters No Inversion Height Stability Class: F (user override) Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 1.55 kilograms/sec Source Height: 221 meters Release Duration: 60 minutes Release Rate: 93 kilograms/min Total Amount Released: 5,580 kilograms FOOTPRINT INFORMATION: (GAUSS SELECTED) **Dispersion Module: Gaussian** Red LOC (132 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (75 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage Dispersion du formol Condition A, vent 2 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1518 hours ST (using computer's clock) CHEMICAL INFORMATION: Chemical Name: FORMIC ACID Molecular Weight: 46.03 g/mol TEEL-3: 30 ppm TEEL-2: 10 ppm TEEL-1: 10 ppm IDLH: 30 ppm 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 INFORMATION: (MANUAL INPUT OF DATA) Wind: 2 meters/sec from SW at 3 meters No Inversion Height Stability Class: A (user override) Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 0.06 kilograms/sec Source Height: 332 meters Release Duration: 60 minutes Release Rate: 3.6 kilograms/min Total Amount Released: 216 kilograms FOOTPRINT INFORMATION: (GAUSS SELECTED) **Dispersion Module: Gaussian** Red LOC (31 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (12 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage Dispersion du formol Condition D, vent 5 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1519 hours ST (using computer's clock) CHEMICAL INFORMATION: Chemical Name: FORMIC ACID Molecular Weight: 46.03 g/mol TEEL-3: 30 ppm TEEL-2: 10 ppm TEEL-1: 10 ppm IDLH: 30 ppm 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 INFORMATION: (MANUAL INPUT OF DATA) Wind: 5 meters/sec from SW at 3 meters No Inversion Height Stability Class: D Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 0.06 kilograms/sec Source Height: 133 meters Release Duration: 60 minutes Release Rate: 3.6 kilograms/min Total Amount Released: 216 kilograms FOOTPRINT INFORMATION: (GAUSS SELECTED) **Dispersion Module: Gaussian** Red LOC (31 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (12 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage Dispersion du formol Condition F, vent 3 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1520 hours ST (using computer's clock) CHEMICAL INFORMATION: Chemical Name: FORMIC ACID Molecular Weight: 46.03 g/mol TEEL-3: 30 ppm TEEL-2: 10 ppm TEEL-1: 10 ppm IDLH: 30 ppm 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 INFORMATION: (MANUAL INPUT OF DATA) Wind: 3 meters/sec from SW at 3 meters No Inversion Height Stability Class: F (user override) Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 0.06 kilograms/sec Source Height: 221 meters Release Duration: 60 minutes Release Rate: 3.6 kilograms/min Total Amount Released: 216 kilograms FOOTPRINT INFORMATION: (GAUSS SELECTED) **Dispersion Module: Gaussian** Red LOC (31 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (12 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC

Incendie de trois cellules de stockage Dispersion des fumées d'incendie_ Seuils équivalents Condition A, vent 2 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1521 hours ST (using computer's clock) ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 2 meters/sec from SW at 3 meters No Inversion Height Stability Class: A (user override) Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 1225.53 kilograms/sec Source Height: 332 meters Release Duration: 60 minutes Release Rate: 74,400 kilograms/min Total Amount Released: 4,466,052 kilograms FOOTPRINT INFORMATION: (GAUSS SELECTED)

Dispersion Module: Gaussian Red LOC (11346 mg/(cu m)) Max Threat Zone: **LOC is not exceeded** Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (31018 mg/(cu m)) Max Threat Zone: **LOC is not exceeded** Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.

Incendie de trois cellules de stockage Dispersion des fumées d'incendie_ Seuls équivalents Condition D, vent 5 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1522 hours ST (using computer's clock)		
ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 5 meters/sec from SW at 3 meters		
No Inversion Height		
0	erature: 20° C	
•	Roughness: open country	
Cloud Cover: 5 tenths		
SOURCE STRENGTH INFORMATION: Direct Source: 1225.53 kilograms/sec Source Height: 133 meters Release Duration: 60 minutes Release Rate: 74,400 kilograms/min Total Amount Released: 4,466,052 kilograms		
FOOTPRINT INFORMATION: (GAUSS SELECTED)		
Dispersion Module: Gaussian Red LOC (31018 mg/(cu m)) Max Threat Zone: LOC is not exceeded		
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC.		
Orange LOC (11346 mg/(cu m)) Max Threat Zone: LOC is not exceeded		
Note: Footprint was not drawn because the ground level concentrations never exceed the LOC		

Incendie de trois cellules de stockage Dispersion des fumées d'incendie_ Seuils équivalents Condition F, vent 3 m/s

SITE DATA INFORMATION: Location: POUPRY, FRANCE Building Air Exchanges Per Hour: 0.32 (sheltered single storied) Time: March 19, 2018 1523 hours ST (using computer's clock) ATMOSPHERIC INFORMATION: (MANUAL INPUT OF DATA) Wind: 3 meters/sec from SW at 3 meters No Inversion Height Stability Class: F (user override) Air Temperature: 20° C Relative Humidity: 50% Ground Roughness: open country Cloud Cover: 5 tenths SOURCE STRENGTH INFORMATION: Direct Source: 1225.53 kilograms/sec Source Height: 221 meters Release Duration: 60 minutes Release Rate: 74,400 kilograms/min Total Amount Released: 4,466,052 kilograms FOOTPRINT INFORMATION: (GAUSS SELECTED) Dispersion Module: Gaussian Red LOC (31018 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC. Orange LOC (11346 mg/(cu m)) Max Threat Zone: LOC is not exceeded Note: Footprint was not drawn because the ground level concentrations never exceed the LOC