SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: Burning Puddle / Pool Fire Puddle Area: 21 square meters Average Puddle Depth: 2 centimeters Initial Puddle Temperature: -161.5° C Flame Length: 7 meters Burn Duration: 1 minute Burn Rate: 295 kilograms/min Total Amount Burned: 295 kilograms THREAT ZONE: Threat Modeled: Thermal radiation from pool fire : 7 meters --- (12.5 kW/(sq m)) Red Orange: 11 meters --- (5.0 kW/(sq m)) Yellow: 13 meters --- (3 kW/(sq m))

SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: 700 cubic meters/hr Source Height: 0 Source State: Evaporating Liquid Source Temperature: -161.5° C Release Duration: 10 minutes Total Amount Released: 116 cubic meters Note: This chemical may flash boil and/or result in two phase flow. Use both dispersion modules to investigate its potential behavior. THREAT ZONE: Threat Modeled: Flammable Area of Vapor Cloud Model Run: Gaussian Red : 7 meters --- (50000 ppm = LEL) Orange: 11 meters --- (25000 ppm = 50% LEL)

SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: Flammable gas is burning as it escapes from pipe Pipe Diameter: 8 inches Pipe Roughness: smooth Hole Area: 1 sq in Max Flame Length: 12 meters Burn Duration: 1 minute Max Burn Rate: 1 kilograms/sec THREAT ZONE: Threat Modeled: Thermal radiation from jet fire Red : 12 meters --- (12.5 kW/(sq m)) Orange: 19 meters --- (5.0 kW/(sq m)) Yellow: 21 meters --- (3 kW/(sq m))

SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: 700 cubic meters/hr Source Height: 0 Source State: Evaporating Liquid Source Temperature: -161.5° C Release Duration: 10 minutes Total Amount Released: 116 cubic meters Note: This chemical may flash boil and/or result in two phase flow. Use both dispersion modules to investigate its potential behavior. THREAT ZONE: Threat Modeled: Flammable Area of Vapor Cloud Model Run: Gaussian Red : 5 meters --- (50000 ppm = LEL) Orange: 7 meters --- (25000 ppm = 50% LEL)

SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: Flammable gas is burning as it escapes from pipe Pipe Diameter: 8 inches Pipe Roughness: smooth Hole Area: 2 sq in Max Flame Length: 12 meters Burn Duration: 1 minute Max Burn Rate: 2 kilograms/sec THREAT ZONE: Threat Modeled: Thermal radiation from jet fire Red : 18 meters --- (12.5 kW/(sq m)) Orange: 21 meters --- (5.0 kW/(sq m)) Yellow: 29 meters --- (3 kW/(sq m))

SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: Burning Puddle / Pool Fire Puddle Area: 43 square meters Average Puddle Depth: 2.3 centimeters Initial Puddle Temperature: -161.5° C Flame Length: 19 meters Burn Duration: 1 minute Burn Rate: 335 kilograms/min Total Amount Burned: 335 kilograms THREAT ZONE: Threat Modeled: Thermal radiation from pool fire Red : 19 meters --- (12.5 kW/(sq m)) Orange: 24 meters --- (5.0 kW/(sq m)) Yellow: 31 meters --- (3 kW/(sq m))

SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: 700 cubic meters/hr Source Height: 0 Source State: Evaporating Liquid Source Temperature: -161.5° C Release Duration: 10 minutes Total Amount Released: 116 cubic meters Note: This chemical may flash boil and/or result in two phase flow. Use both dispersion modules to investigate its potential behavior. THREAT ZONE: Threat Modeled: Flammable Area of Vapor Cloud Model Run: Gaussian Red : 7 meters --- (50000 ppm = LEL) Orange: 11 meters --- (25000 ppm = 50% LEL)

SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: 700 cubic meters/hr Source Height: 0 Source State: Evaporating Liquid Source Temperature: -161.5° C Release Duration: 10 minutes Total Amount Released: 211 cubic meters Note: This chemical may flash boil and/or result in two phase flow. Use both dispersion modules to investigate its potential behavior. THREAT ZONE: Threat Modeled: Flammable Area of Vapor Cloud Model Run: Gaussian Red : 16 meters --- (50000 ppm = LEL) Orange: 25 meters --- (25000 ppm = 50% LEL)

SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: Flammable gas is burning as it escapes from pipe Pipe Diameter: 8 inches Pressure 3 barg Pipe Roughness: smooth Hole Area: 1 sq in Max Flame Length: 6 meters Burn Duration: 1 minute Max Burn Rate: 1 kilograms/sec THREAT ZONE: Threat Modeled: Thermal radiation from jet fire Red : 6 meters --- (12.5 kW/(sq m)) Orange: 8 meters --- (5.0 kW/(sq m)) Yellow: 11 meters --- (3 kW/(sq m))

SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: Burning Puddle / Pool Fire Puddle Area: 2.1 square meters Average Puddle Depth: 0.4 centimeters Initial Puddle Temperature: -161.5° C Flame Length: puddle area Burn Duration: less than 1 minute Total Amount Burned: 75 kilograms THREAT ZONE: Threat Modeled: Thermal radiation from pool fire Red : --- (12.5 kW/(sq m)) Orange: 4 meters --- (5.0 kW/(sq m)) Yellow: 7 meters --- (3 kW/(sq m))

SITE DATA: Location: BERGEGGI, SAVONA, ITALY Building Air Exchanges Per Hour: 0.63 (unsheltered single storied) CHEMICAL DATA: Chemical Name: METHANE CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm LEL: 50000 ppm UEL: 150000 ppm Ambient Boiling Point: -161.5° 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 0° true 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: 700 cubic meters/hr Source Height: 0 Source State: Evaporating Liquid Source Temperature: -161.5° C Release Duration: 10 minutes Total Amount Released: 118 cubic meters Note: This chemical may flash boil and/or result in two phase flow. Use both dispersion modules to investigate its potential behavior. THREAT ZONE: Threat Modeled: Flammable Area of Vapor Cloud Model Run: Gaussian Red : 9 meters --- (50000 ppm = LEL) Orange: 11 meters --- (25000 ppm = 50% LEL)