



LPG station



Parameters

General Risk Parameters

Use Free Field Modelling	No Free Field
Distance to Site Boundary	0 m
Late Pool Fire	Exclude Effects
Minimum Case Frequency	1e-012 /AvgeYear
Minimum Event Probability	1e-012
Population Omega Factor	0.000168
Maximum Number of Subsquares across Ellipse	10.00
Maximum Number of Subdivisions per Square	5.00
Factor for Toxic F-N Spread	2
Grid Sizing	Calculated
Grid Bounds Minimum X	-1000 m
Grid Bounds Maximum X	1000 m
Grid Bounds Minimum Y	-1000 m
Grid Bounds Maximum Y	1000 m
Grid Calculation Method	Number of cells
Grid cell size	10 m
Maximum number of cells	40,000.00
Aversion Index	1.2
Indoor Population Omega Factor	0
Number of wind subdivisions per sector	1.00
Method for handling Indoor/Outdoor risk	Indoor and outdoor risk calculations
Inter-ellipse interpolation method	Weighted
Method option	Normal dispersion
Cylinder height over radius ratio	3
Building damage method	Worst point
Reflection method	Calculated Angle
Number of X steps per view	11.00
Minimum X step	0.1 m
Number of time steps - continuous clouds	5.00
Between Cloud Views	Minimise Gaps
Pressure exceedance curves	

Elevation of Floor or Ceiling	Calculate	
	0	m
Concentration method for filling	Stoichiometric	
Minimum probability of death for explosions	0.001	
Minimum Pressure Filter	0.01	bar
Separation specification	Use Ratio	
Critical Separation Ratio	0.5	
Cloud Shape of Area Integration	Elliptical	
Explosion efficiency method	100% efficiency	
Explosion Type Calculation Method	Polynomial Curve-Fit Equations	
Number of Blast Curve Discretization Points	30,000.00	
Maximum No. effect points along transect	2.00	
Low to medium criterion	0.006	
Medium to high criterion	0.08	
Options available	Volume Averaged	
Method option:	Ground reflection	
Reflection factor	1	
Unconfined Explosion Strength	2	
Explosion Efficiency	1	fraction
Flammable Mass Calculation Type	Area Weighted Mass Integral	
Minimum Explosion Energy	0	kJ
Maximum number of time steps	100.00	
Number of timesteps - time varying clouds	10.00	
Active Shut Down	No Shut Down	
Fraction of Population Indoors for Societal Risk	0.9	fraction
Fraction of Population Indoors for Individual Risk	0	fraction
Indoor Vulnerability		
Vulnerability Model	Discrete Overpressure	
Pressure Method - Building calculation	Reflected	
Pressure Method - Individual Risk	Side on	
Pressure Method - Grid population	Side on	
Overpressure for Lethality (1)	0.1	bar
Overpressure for Lethality (2)	0.3	bar

Lethality (1)	0.025	fraction
Lethality (2)	1	fraction
Lethality (1)	1	fraction
Equation Constant (1)	0.3	bar
Equation Exponent (1)	1	
Overpressure Offset (1)	0.3	bar
Impulse Offset (1)	0	N.s/m2
ProbitA	-10.46	
ProbitB	1.35	
ProbitN	1	
Number of overpressures	2.00	
Number of impulses	1.00	
Fireball (Societal Radiation Criteria Zone)	0.1	fraction
Fireball (Individual Radiation Criteria Zone)	1	fraction
Fireball (Societal Flammable Probit Zone)	0	fraction
Fireball (Individual Flammable Probit Zone)	0	fraction
Jet Fire (Societal Radiation Criteria Zone)	0.1	fraction
Jet Fire (Individual Radiation Criteria Zone)	1	fraction
Jet Fire (Societal Flammable Probit Zone)	0	fraction
Jet Fire (Individual Flammable Probit Zone)	0	fraction
Pool Fire (Societal Radiation Criteria Zone)	0.1	fraction
Pool Fire (Individual Radiation Criteria Zone)	1	fraction
Pool Fire (Societal Flammable Probit Zone)	0	fraction
Pool Fire (Individual Flammable Probit Zone)	0	fraction
Light Explosion Damage vulnerability	0.025	fraction
Heavy explosion damage vulnerability	1	fraction
Method for Radiation Vulnerability	Use Probit method	
Flash Fire Vulnerability	0.1	
Toxic Vulnerability	0.1	
Pool Fire Radiation Intensity Level (1)	4	kW/m2
Pool Fire Radiation Intensity Level (2)	12.5	kW/m2
Pool Fire Radiation Intensity Level (3)	37.5	kW/m2
Jet Fire Radiation Intensity Level (1)		

Jet Fire Radiation Intensity Level (2)	4 kW/m2
Jet Fire Radiation Intensity Level (3)	12.5 kW/m2
Fire Ball Radiation Intensity Level (1)	37.5 kW/m2
Fire Ball Radiation Intensity Level (2)	4 kW/m2
Fire Ball Radiation Intensity Level (3)	12.5 kW/m2
	37.5 kW/m2

Outdoor Vulnerability

Vulnerability Model	Discrete Overpressure
Pressure Method - Building calculation	Reflected
Pressure Method - Individual Risk	Side on
Pressure Method - Grid population	Side on
Overpressure for Lethality (1)	0.3 bar
Lethality (1)	1 fraction
Lethality (1)	1 fraction
Equation Constant (1)	0.3 bar
Equation Exponent (1)	1
Overpressure Offset (1)	0.3 bar
Impulse Offset (1)	0 N.s/m2
ProbitA	-10.46
ProbitB	1.35
ProbitN	1
Number of overpressures	1.00
Number of impulses	1.00
Fireball (Societal Radiation Criteria Zone)	1 fraction
Fireball (Individual Radiation Criteria Zone)	1 fraction
Fireball (Societal Flammable Probit Zone)	0.14 fraction
Fireball (Individual Flammable Probit Zone)	1 fraction
Jet Fire (Societal Radiation Criteria Zone)	1 fraction
Jet Fire (Individual Radiation Criteria Zone)	1 fraction
Jet Fire (Societal Flammable Probit Zone)	0.14 fraction
Jet Fire (Individual Flammable Probit Zone)	1 fraction
Pool Fire (Societal Radiation Criteria Zone)	1 fraction
Pool Fire (Individual Radiation Criteria Zone)	1 fraction

Pool Fire (Societal Flammable Probit Zone)	0.14	fraction
Pool Fire (Individual Flammable Probit Zone)	1	fraction
Light Explosion Damage vulnerability	0	fraction
Heavy explosion damage vulnerability	1	fraction
Method for Radiation Vulnerability	Use Probit method	
Flash Fire Vulnerability	1	
Toxic Vulnerability	1	
Pool Fire Radiation Intensity Level (1)	4	kW/m2
Pool Fire Radiation Intensity Level (2)	12.5	kW/m2
Pool Fire Radiation Intensity Level (3)	37.5	kW/m2
Jet Fire Radiation Intensity Level (1)	4	kW/m2
Jet Fire Radiation Intensity Level (2)	12.5	kW/m2
Jet Fire Radiation Intensity Level (3)	37.5	kW/m2
Fire Ball Radiation Intensity Level (1)	4	kW/m2
Fire Ball Radiation Intensity Level (2)	12.5	kW/m2
Fire Ball Radiation Intensity Level (3)	37.5	kW/m2