

METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	* * *
Year	2008
Summary	Due to technical defect in engines in a generator Room at a biogas plant an explosion occurred Causing fire, damage and pollution
Country	D
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Methane (gas), Oil n.o.s.
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Defective-working, Explosion, Fire, Damage, Smoke-emission, Fire fighting/Emergency response, Fire fighting/Emergency response, Fire fighting/Emergency response, Block-of-system, Cooling, Release, Block-of-system, Clean-up
General accident information	
Class/Quality	* * *
Year	2006
Summary	One of more corroded bolts of lid on down-side Of a strainer caused loosening of the lid, Release of crack gas, pollution of air and Plant shut-down
Country	NL
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Butane, Ethane (gas), Hydrogen (gas), Methane (gas), Pentane, Propane, Propylene
Cause	Management-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Management-failure, Management-failure, Management-failure, Management-failure, Clean, Corrosion, Get-loose/Lose, Wrong-position, Release, Pollution/Contamination, Block-of-system, Fire fighting/Emergency response, Fire fighting/Emergency response, Fire fighting/Emergency response
General accident information	
Class/Quality	* * * *
Year	2005
Summary	Gas containing carbon dioxide caused corrosion due To condensation of water in pipe transporting Hydrocarbons, release, stench and pollution
Country	NL
Activity	PROCESSING
Location	REFINERY
Chemicals	Carbon dioxide (gas), Ethane (gas), Ethene (pressurized), Ethylene oxide (eto), Hydrocarbons (gas), Methane (gas), Water
Cause	Management-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Management-failure, Management-failure, Condensation, Corrosion, Damage, Release, Pollution/Contamination, Stench-emission, Repair, Release, Repair

TRR S.r.l.

Il Direttore Generale

Ing. Alfredo Romano



METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	* * * * *
Year	2005
Summary	Fork truck with trailer pulled valve and pipe Causing release of propylene, ignition, explosion, Massive fire, evacuation, shelter in place, road Closure, extensive damage and 36 casualties
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Ethane (gas), Ethylene (pressurized), Hydrocarbons (gas), Methane (gas), Propane, Propylene, Propylene, Propylene
Cause	Management-failure
Fatalities/Injuries	1 / 36
Occurrences or events	Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Drive, Drive, Drive, Collision, Damage, Damage, Release, Vaporize, Stench-emission, Evacuation, Safety-measures, Block-of-system, Wrong-action, Safety-measures, Block-of-system, Block-of-system, Ignition, Explosion, Blow-away, Fire, Safety-measures, Evacuation, Shelter-in-place, Traffic-interruption, Fire, Fire fighting/Emergency response, Collapse/Destroy, Damage, Overheating, Burst/Rupture, Damage, Release, Fire fighting/Emergency response, Fire fighting/Emergency response, Fire fighting/Emergency response, Damage
General accident information	
Class/Quality	* * *
Year	2004
Summary	Equipment (compressor) failure caused release of Hydrogen sulphide into air, pollution at refinery During shutdown for maintenance
Country	USA
Activity	PROCESSING
Location	REFINERY
Chemicals	Hexane, Hydrogen sulphide (h2s), Methane (gas)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Block-of-system, Mechanical failure, Release, Safety-measures, Pollution/Contamination
General accident information	
Class/Quality	* * * * *
Year	2002
Summary	Inerting gas pipeline with natural gas failed Because natural gas was transferred to Blast furnace instead of cokes oven gas Causing release, explosion and 29 casualties
Country	B
Activity	PROCESSING
Location	FACTORY
Chemicals	Carbon monoxide (co), Cokes gas, Cokes gas, Hydrogen (gas), Methane (gas), Natural gas (pressurized), Natural gas (pressurized), Nitrogen (gas)
Cause	Management-failure
Fatalities/Injuries	3 / 26
Occurrences or events	Management-failure, Management-failure, Insufficient/Miscommunication, Insufficient/Miscommunication, Block-of-system, Clean, Maintenance, Replace, Wrong-position, Clean, Burn, Switch, Overpressure, Defective-working, Release, Wrong-action, Ignition, Explosion

METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	* * * *
Year	2002
Summary	Failure of crank mechanism of cylinder in Compressor caused mechanical rupture, release of Inflammable mixture and benzene, pollution of air, Jet fire and heavy damage
Country	I
Activity	PROCESSING
Location	REFINERY
Chemicals	Benzene/Benzol, Benzine (fp<21/C) (gasoline), Butane, Ethane (gas), Hydrogen (gas), Methane (gas), Propane
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Defective-working, Mechanical failure, Burst/Rupture, Blow-away, Release, Pollution/Contamination, Ignition, Fire, Fire, Release, Smoke-emission, Block-of-system, Safety-measures, Fire fighting/Emergency response, Fire fighting/Emergency response, Safety-measures, Block-of-system, Block-of-system, Fire fighting/Emergency response, Fire fighting/Emergency response, Damage, Collapse/Destroy
General accident information	
Class/Quality	* * *
Year	2002
Summary	Refinery fined for repeatedly releasing too much Toxic pollution into air causing smoke, stench Emission and air pollution
Country	USA
Activity	PROCESSING
Location	REFINERY
Chemicals	Carbon black, Carbon monoxide (co), Hydrocarbons (gas), Methane (gas), Propane, Sulphur, Sulphur
Cause	Management-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Block-of-system, Burn, Release, Smoke-emission, Stench-emission, Pollution/Contamination
General accident information	
Class/Quality	* * * *
Year	2002
Summary	Contaminated chemicals in chlorine dioxide Generator at pulp mill caused explosions of pipe, Releases of chlorine dioxide and chlorine, air Pollution, evacuation and damage
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Chlorides, Chlorine, Chlorine, Chlorine dioxide, Chlorine dioxide, Chlorine dioxide, Hydrogen chloride, Hydrogen chloride, Methane (gas), Oxygen (gas), Oxygen (gas), Sulphuric acid (sfa)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Pollution/Contamination, Wrong-composition, Wrong-composition, Chemical reaction, Overpressure, Break, Release, Safety-measures, Evacuation, Explosion, Disperse/Spread, Wrong-action, Wrong-position, Evacuation, Block-of-system, Fire fighting/Emergency response, Dilute, Condensation, Overpressure, Explosion, Release, Traffic-interruption, Explosion, Release, Pollution/Contamination, Fire fighting/Emergency response, Repair

METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	* * * *
Year	2001
Summary	Operator did not identify toxic hazard of hydrogen Sulphide and inappropriate design of installation And maintenance procedure caused pollution of air And 2 casualties
Country	F
Activity	PROCESSING
Location	FACTORY
Chemicals	Hydrogen sulphide (h2s), Methane (gas)
Cause	Management-failure
Fatalities/Injuries	2 / 1
Occurrences or events	Management-failure, Management-failure, Management-failure, Natural event, Chemical reaction, Release, Pollution/Contamination, Maintenance, Defective-working, Draining, Remove, Mount/Connect, Human-operations, Replace, Wrong-action, Safety-measures, Fire fighting/Emergency response
General accident information	
Class/Quality	* * *
Year	1999
Summary	While proving liquid ethane meter Hose ruptured causing release, Ignition, explosions, fires, evacuation And 15 casualties
Country	CDN
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Ethane (gas), Methane (gas)
Cause	Technical-failure
Fatalities/Injuries	1 / 15
Occurrences or events	Maintenance, Defective-working, Safety-measures, Burst/Rupture, Release, Ignition, Explosion, Fire, Smoke-emission, Evacuation, Traffic-interruption, Fire fighting/Emergency response
General accident information	
Class/Quality	* * * *
Year	1999
Summary	Deflagration occurred in a Power cogeneration plant Causing temperature in silos Increased and fire
Country	D
Activity	PROCESSING
Location	POWER STATION/PLANT
Chemicals	Carbon monoxide (co), Inflammable gas, Methane (gas), Nitrogen (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Explosion, Overheating, System-operations, Wrong-composition, Overfill/Overload, Explosion, Fire, Smoke-emission, Switch, System-operations, Safety-measures, Fire, Defective-working, Fire fighting/Emergency response, Fire fighting/Emergency response, Pollution/Contamination, Collapse/Destroy, Damage, Clean

METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	* * *
Year	1999
Summary	Employees were filling storage Tank with asphalt when an Explosion occurred causing Fire, pollution and evacuation
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Asphalt, Hydrocarbons (gas), Methane (gas), Paraffin
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Fill, Explosion, Fire, Smoke-emission, Disperse/Spread, Pollution/Contamination, Stench-emission, Evacuation, Fire fighting/Emergency response, Fire fighting/Emergency response, Fire fighting/Emergency response
General accident information	
Class/Quality	* * * * *
Year	1997
Summary	Explosion occurred in distillation column of air Separation unit (asu) at ethylene plant causing Extensive material damage and at least 35 casualties
Country	CN
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Aluminium, Aluminium, Carbon dioxide (gas), Ethylene (cooled), Ethylene (pressurized), Methane (gas), Nitrogen (gas), Nitrogen (pressurized), Oxygen (gas)
Cause	Management-failure
Fatalities/Injuries	4 / 31-50
Occurrences or events	Management-failure, Management-failure, Management-failure, System-operations, Natural event, Pollution/Contamination, Release, Pollution/Contamination, Wrong-composition, Ignition, Explosion, Blast-wave, Fall, Blow-away, Blow-away, Collapse/Destroy
General accident information	
Class/Quality	* * *
Year	1996
Summary	During repairs work cokes gas released from A cooking plant on a gasholder causing fire And evacuation
Country	F
Activity	PROCESSING
Location	FACTORY
Chemicals	Carbon dioxide (gas), Carbon monoxide (co), Cokes gas, Hydrogen (gas), Methane (gas)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Repair, Release, Fire, Evacuation, Fire fighting/Emergency response

METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	* * * *
Year	1996
Summary	Wrong welding caused incipient crack inside Separator during start-up of cryogenic unit Forcing bursting and releasing hydrocarbons
Country	D
Activity	PROCESSING
Location	REFINERY
Chemicals	Ethane (gas), Ethylene (pressurized), Hydrocarbons (gas), Hydrogen (gas), Methane (gas)
Cause	Management-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Maintenance, Deformation, Physical effects, Physical effects, Corrosion, Crack, Burst/Rupture, Release, Safety-measures, Evacuation, Safety-measures
General accident information	
Class/Quality	* * * * *
Year	1996
Summary	Decomposition caused release And explosion after start up Of Idpe autoclave reactor and 1 casualty
Country	NL
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Butene, Carbon black, Carbon black, Ethylene (pressurized), Ethylene (pressurized), Ethylene (pressurized), Ethylene (pressurized), Glycol, Hydrogen (gas), Hydrogen (gas), Methane (gas), Methane (gas), Nitrogen (gas), Nitrogen (pressurized), Propylene
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Maintenance, Human-operations, Purging, System-failure, Wrong-composition, Pump-over, Wrong-composition, System-operations, Mechanical failure, Chemical reaction, Overheating, Overpressure, Emergency-stop, System-operations, Release, Burst/Rupture, System-failure, Static-electricity, Ignition, Ignition, Chemical reaction, Explosion, Blast-wave, Fire, Evacuation, Fire fighting/Emergency response, Emergency-stop, Block-of-system, Fire fighting/Emergency response, Fire fighting/Emergency response, Fire fighting/Emergency response, Release, Purging, Fire fighting/Emergency response
General accident information	
Class/Quality	* * * *
Year	1993
Summary	Degassing line of a filter of a hyam reactor At a caprolactam plant was ruptured due to An explosion (detonation)
Country	NL
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Hydrogen (gas), Hydroxylaminephospate (hyam), Methane (gas), Nitrogen (gas), Nitrogen oxide, Nitrogen oxide
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	System-operations, System-operations, Human-operations, Defective-working, Defective-working, Chemical reaction, Ignition, Detonation, Explosion, Break

METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	* * * * *
Year	1993
Summary	Corrosion of line caused a Guillotine fracture, release And fire in spite of regulary 2/Years ultrasonic inspection
Country	D
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Carbon disulphide, Carbon disulphide, Methane (gas), Sulphur, Sulphur dioxide
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Heating, Chemical reaction, Corrosion, Burst/Rupture, Release, Fire, Smoke-emission, Release, Emergency-stop, Block-of-system, Fire fighting/Emergency response, Traffic-interruption
General accident information	
Class/Quality	* * * * *
Year	1992
Summary	Spontaneous rupture in curve in cracking unit at Refinery caused vapour/Gas explosion, flash fire In desulphurization unit, evacuation of the Installation and traffic interruption
Country	B
Activity	PROCESSING
Location	REFINERY
Chemicals	Crude oil, Hydrogen (gas), Hydrogen sulphide (h2s), Inflammable gas, Methane (gas), Petroleum, Process gas
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Crack, Burst/Rupture, Release, Explosion, Fire, Evacuation, Block-of-system, El-power-brake, Traffic-interruption, Fire fighting/Emergency response
General accident information	
Class/Quality	* * * *
Year	1989
Summary	Crack in line caused release And fire; a lot of damage
Country	D
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Benzene/Benzol, Hydrogen (gas), Methane (gas), Toluene (toluol/Methylbenzene)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	El-power-brake, System-operations, Block-of-system, Underheating, Crack, Release, Fire, Fire fighting/Emergency response, Block-of-system, Cooling, Purify, Safety-measures

METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	* * * *
Year	1989
Summary	A by-pass valve erroneously Left open & gas could enter Inside a furnace causing an Explosion and 3 casualties
Country	I
Activity	PROCESSING
Location	REFINERY
Chemicals	Methane (gas)
Cause	Human-failure
Fatalities/Injuries	1 / 2
Occurrences or events	No-action, Operators error, Wrong-position, Release, Ignition, Explosion
General accident information	
Class/Quality	* * * * *
Year	1987
Summary	Pipe carrying synthesis gas Released hydrogen causing an Explosion and rupturing vent Header and other pipes
Country	IRL
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Ammonia, Hydrogen (gas), Hydrogen (gas), Methane (gas), Methane (gas), Synthesis gas
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Heating, Cooling, Fatigue, Wrong-action, Corrosion, Crack, Mechanical failure, Repair, Wrong-position, Burst/Rupture, Release, Explosion, Fire, Burst/Rupture, Release, Fire, Fall, Release, Disperse/Spread, Fire, Blow-away, Fire fighting/Emergency response, Block-of-system, Emergency-stop, Damage
General accident information	
Class/Quality	* * * * *
Year	1987
Summary	Oil refinery was struck by explosion and fireball Causing toxic release and at least 2 casualties
Country	USA
Activity	PROCESSING
Location	REFINERY
Chemicals	Butane, Hydrofluoric acid (hfa), Hydrofluoric acid (hfa), Hydrogen fluoride (hf), Methane (gas), Potassium hydroxide, Propane
Cause	Unknown-cause
Fatalities/Injuries	1 / 2-3
Occurrences or events	Wrong-composition, Chemical reaction, Explosion, Fall, Damage, Block-of-system, Release, Fire, Fireball, Release, Pollution/Contamination, Fire fighting/Emergency response

METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	* * * * *
Year	1985
Summary	Accumulation of frozen compressor oil caused Natural gas liquefaction plant to shut down, welds In patch plate on small vessel to fail, release, Ignition, fire and 6 casualties
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Liquified natural gas (lng), Liquified natural gas (lng), Methane (gas), Natural gas liquids (npl), Oil thermic
Cause	Management-failure
Fatalities/Injuries	1 / 6
Occurrences or events	Management-failure, Management-failure, Management-failure, Release, No-action, Solidify/Icing, Human-operations, Draining, Deformation, Burst/Rupture, Blow-away, Release, Blow-away, Infiltrate/Seep/Migrate, Ignition, Fire, Defective-working, Defective-working, Fire fighting/Emergency response
General accident information	
Class/Quality	
Year	1984
Summary	The use of wrong steel caused Corrosion and release
Country	ET
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Carbon dioxide (gas), Hydrogen (gas), Hydrogen (gas), Methane (gas), Water
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Chemical reaction, Chemical reaction, Corrosion, Crack, Release
General accident information	
Class/Quality	* * *
Year	1982
Summary	Rupture of weld of pipeline Of compressor at methanol Plant
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Carbon dioxide or monoxide, Hydrogen (gas), Methane (gas), Synthesis gas
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Burst/Rupture, Release, Mix, Ignition, Explosion, Fire, Repair
General accident information	
Class/Quality	
Year	1982
Summary	Shell rupture of a secondary Reformer
Country	F
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Air, Methane (gas), Synthesis gas
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Crack, Release, Mix, Overheating, Burst/Rupture, Release, Emergency-stop, Repair

METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	
Year	1981
Summary	Product run via bottom drain Of column and insufficient Heat caused overpressure and Release through safety valve
Country	NL
Activity	PROCESSING
Location	REFINERY
Chemicals	Hydrocarbons (gas), Methane (gas)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Human-operations, Wrong-action, Underheating, Overpressure, Release, Disperse/Spread, Pollution/Contamination
General accident information	
Class/Quality	* * *
Year	1975
Summary	Explosion and fire in a gas Reforming plant caused 14 casualties
Country	ZA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Methane (gas), Oxygen (gas), Steam
Cause	Human-failure
Fatalities/Injuries	7 / 7
Occurrences or events	Human-operations, Wrong-action, Underpressure, Human-operations, Wrong-action, Wrong-action, Explosion, Fire, Emergency-stop
General accident information	
Class/Quality	* * *
Year	1975
Summary	Overheating of reactor and Outlet line caused rupture of Outlet line, spill, ignition, Fire and 212 casualties
Country	D
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Acetylene, Ethylene (pressurized), Hydrogen (gas), Methane (gas)
Cause	Unknown-cause
Fatalities/Injuries	2 / 10
Occurrences or events	Overheating, Overheating, Burst/Rupture, Release, Ignition, Explosion, Fire
General accident information	
Class/Quality	* * *
Year	1975
Summary	Fire of product during repair of heat-exchanger At benzene plant caused 11 casualties
Country	J
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Hydrogen (gas), Methane (gas)
Cause	Human-failure
Fatalities/Injuries	1 / 11
Occurrences or events	Maintenance, Clean, Repair, Wrong-position, Wrong-composition, Release, Welding/Cutting, Ignition, Fire

METHANE (GAS) - PROCESSING

General accident information	
Class/Quality	* * *
Year	1974
Summary	Coke-oven gas released from Leaking pipe into the open air And the gas cloud ignited and Exploded causing 16 casualties
Country	D
Activity	PROCESSING
Location	FACTORY
Chemicals	Carbon monoxide (co), Cokes gas, Hydrogen (gas), Methane (gas)
Cause	Technical-failure
Fatalities/Injuries	2 / 14
Occurrences or events	Mechanical failure, Release, Pollution/Contamination, Ignition, Explosion
General accident information	
Class/Quality	
Year	1974
Summary	Explosion in pipe system
Country	F
Activity	PROCESSING
Location	OTHER
Chemicals	Hydrogen (gas), Methane (gas)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Explosion

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * *
Year	2010
Summary	Worker was working on a high-pressure Separator when a line broke causing release of Natural gas, fire, explosion and 1 casualty
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Maintenance, Break, Release, Fire, Explosion
General accident information	
Class/Quality	* * *
Year	2009
Summary	Natural gas explosion at steam generator during Maintenance caused dust release, evacuation and 8 casualties
Country	F
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Dust n.o.s., Natural gas (pressurized), Natural gas (pressurized), Steam
Cause	Technical-failure
Fatalities/Injuries	2 / 6
Occurrences or events	Natural event, Human-operations, Heating, Ignition, Explosion, Blow-away, Release, Collapse/Destroy, Damage, Block-of-system, Safety-measures, Evacuation, Fire fighting/Emergency response
General accident information	
Class/Quality	* * * *
Year	2009
Summary	Lng tanker truck not cleaned before entering Maintenance building which was not fit for work on Lng caused release, ignition, explosions, fire And destruction of building
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Liquefied natural gas (Lng), Natural gas (pressurized), Waste oil
Cause	Management-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Management-failure, Management-failure, Management-failure, Repair, Not-cleaned, Wrong-action, Wrong-position, Heating, Overpressure, Release, Ignition, Explosion, Fire, Safety-measures, Explosion, Fireball, Fire fighting/Emergency response, Explosion, Collapse/Destroy

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	*****
Year	2009
Summary	Serious safety violations caused ineffectively Purging of new gas line, release of natural gas Into boiler room, explosion, damage, release of Ammonia, pollution and 71 casualties
Country	USA
Activity	PROCESSING
Location	FACTORY
Chemicals	Ammonia anhydrous, Ammonia anhydrous, Natural gas (pressurized)
Cause	Management-failure
Fatalities/Injuries	4 / 67
Occurrences or events	Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Constructionwork, Constructionwork, Human-operations, Purging, Ventilation, No-action, Wrong-action, Wrong-composition, Defective-working, Release, Stench-emission, No-action, Pollution/Contamination, Ignition, Explosion, Fire, Damage, Collapse/Destroy, Domino, Damage, Release, Pollution/Contamination, Release, Pollution/Contamination
General accident information	
Class/Quality	*****
Year	2006
Summary	Numerous safety violations caused overheating of Unsealed mixing tank at ink and paint plant, Explosion, fireball, fire, evacuation and 10 casualties
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Alcohol, Alcohol, Heating oil, Heptane, Heptane, Heptane, Ink, Ink, Natural gas (pressurized), Nitrocellulose/Nitrous cellulose, Nitrocellulose/Nitrous cellulose, Paint, Pigment n.o.s., Propane, Propanol/Propyl alcohol, Resin powder, Solvent toxic, Solvent toxic
Cause	Management-failure
Fatalities/Injuries	1 / 10
Occurrences or events	Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Mix, Human-operations, Heating, Unload, Load/Stow, Human-operations, No-action, Wrong-position, Overheating, Human-operations, Human-operations, Wrong-action, Wrong-position, Pollution/Contamination, Ignition, Safety-measures, Defective-working, Explosion, Fireball, Blast-wave, Fire, Blow-away, Blow-away, Damage, Release, Damage, Release, Evacuation, Collapse/Destroy, Damage, Fire fighting/Emergency response, Fire fighting/Emergency response, Fire fighting/Emergency response, Fire fighting/Emergency response

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	***
Year	2006
Summary	Pipeline at natural gas plant burst causing fire, Evacuation of businesses and homes and closure of Road
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Burst/Rupture, Release, Fire, Evacuation, Traffic-interruption, Fire fighting/Emergency response
General accident information	
Class/Quality	***
Year	2005
Summary	A technical failure in a refinery lead to h2s and SO2 release causing 83 complaints about stench of Rotten eggs in downwind area
Country	NL
Activity	PROCESSING
Location	REFINERY
Chemicals	Hydrogen sulphide (h2s), Natural gas (pressurized), Sulphur dioxide
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Wrong-composition, Defective-working, Release, Shelter-in-place, Stench-emission, Fire fighting/Emergency response, Burn
General accident information	
Class/Quality	***
Year	2004
Summary	An explosion in an naphtha processing unit caused Ignition of super heater corn product, fire and 4 casualties
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Naphtha, Natural gas (pressurized), Vegetable oil (corn)
Cause	Technical-failure
Fatalities/Injuries	1 / 4
Occurrences or events	El-power-brake, Not-working, System-operations, Ignition, Fire, Fire fighting/Emergency response

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * *
Year	2004
Summary	Hydrogen escaped from line in hydrogen heater and Mixed with superheated air caused an explosion, Fire and 1 casualty
Country	USA
Activity	PROCESSING
Location	REFINERY
Chemicals	Air, Hydrogen (gas), Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Overpressure, Burst/Rupture, Defective-working, Human-operations, Release, Wrong-composition, Explosion, Fire, Fire fighting/Emergency response, Purging
General accident information	
Class/Quality	* *
Year	2004
Summary	Explosion occurred at gas factory causing Fire, evacuation and 2 casualties
Country	RI
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Inflammable gas, Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 2
Occurrences or events	Explosion, Blow-away, Collision, Fire, Evacuation, Fire fighting/Emergency response
General accident information	
Class/Quality	* *
Year	2004
Summary	Fire at natural gas processing plant pushed Unprocessed gas into gas transmission system and Caused pollution of air, evacuation and closure of Highway
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized), Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Fire, Smoke-emission, Pollution/Contamination, Penetrate/Puncture, Wrong-composition, Evacuation, Traffic-interruption, Safety-measures, Fire fighting/Emergency response, Block-of-system

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	***
Year	2003
Summary	Leak in burner tube of tank which heated crude oil To separate it into components caused pollution And fire
Country	USA
Activity	PROCESSING
Location	REFINERY
Chemicals	Crude oil, Natural gas (pressurized), Water
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Damage, Release, Pollution/Contamination, Fire, Dilute, Fire fighting/Emergency response, Fire fighting/Emergency response, Clean-up
General accident information	
Class/Quality	**
Year	2003
Summary	Worker did routine maintenance at tower used to Remove carbon dioxide from natural gas when torch Ignited natural gas causing explosion & 1 casualty
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Maintenance, Welding/Cutting, Ignition, Explosion, Fire fighting/Emergency response
General accident information	
Class/Quality	*****
Year	2003
Summary	Start up procedures were not Correctly followed causing Release, ignition, explosion And 5 casualties
Country	NL
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Inflammable gas, Natural gas (pressurized), Natural gas (pressurized), Natural gas (pressurized), Nitrogen (gas)
Cause	Management-failure
Fatalities/Injuries	3 / 2
Occurrences or events	Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Release, Maintenance, Repair, Block-of-system, Clean, Block-of-system, Purging, Wrong-position, System-operations, Wrong-action, Human-operations, No-action, Wrong-position, Release, Wrong-composition, Switch, Ignition, Explosion, Overpressure, Blow-away, Fall, Safety-measures, Safety-measures, Safety-measures, Fire fighting/Emergency response, Fire fighting/Emergency response

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * * * *
Year	2003
Summary	While cleaning production line at plastics factory Dust was ignited causing dust explosions, fire, Evacuation and 46 casualties
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Natural gas (pressurized), Plastic fibres, Resin phenolic
Cause	Management-failure
Fatalities/Injuries	7 / 39
Occurrences or events	Management-failure, Management-failure, Management-failure, Defective-working, Wrong-position, No-action, Block-of-system, Clean, Dust-emission, Ignition, Dust-explosion, Dust-emission, Dust-explosion, Fire, Smoke-emission, Pollution/Contamination, Evacuation, Safety-measures, Traffic-interruption, Fire fighting/Emergency response
General accident information	
Class/Quality	* *
Year	2003
Summary	During routine pressure testing an Unexpected pressure release occurred Causing explosion at gas plant, fire And 4 casualties
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 3
Occurrences or events	Maintenance, Overpressure, Release, Explosion, Fire fighting/Emergency response

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * * * *
Year	2002
Summary	Several violations caused release of hydrogen Sulphide and hydrocarbons during depressurisation Of compressor, pollution of air and 1 casualty
Country	CDN
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Hydrocarbons (gas), Hydrogen sulphide (h2s), Hydrogen sulphide (h2s), Hydrogen sulphide (h2s), Natural gas (pressurized)
Cause	Management-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Insufficient/Miscommunication, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Wrong-action, Heating, Wrong-position, Natural event, Clog, Defective-working, Defective-working, Wrong-composition, Defective-working, Safety-measures, Safety-measures, Human-operations, Human-operations, No-action, Human-operations, Human-operations, Dismount/Disconnect, System-failure, Release, Pollution/Contamination, Safety-measures, Defective-working, Safety-measures, Fall, Safety-measures, No-action, Human-operations, Human-operations, Human-operations, Safety-measures, Human-operations
General accident information	
Class/Quality	* *
Year	2002
Summary	Explosion at natural gas plant caused fire and 1 casualty
Country	AZ
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Explosion, Fire, Block-of-system, Fire fighting/Emergency response
General accident information	
Class/Quality	* * *
Year	2002
Summary	After removing a valve, gas escaped and ignited By a nearby heater treater, causing fireball, fire And 1 casualty
Country	USA
Activity	PROCESSING
Location	REFINERY
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Maintenance, Remove, Release, Ignition, Fireball, Fire

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	**
Year	2002
Summary	Fire broke out in an ammonia factory in a natural Gas line causing 6 casualties and evacuation of Nearby refinery
Country	KWT
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 6
Occurrences or events	Maintenance, Explosion, Fire, Evacuation, Fire fighting/Emergency response
General accident information	
Class/Quality	***
Year	2002
Summary	Explosion occurred in Compressors causing fire, Release, pollution, evacuation And 2 casualties
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Management-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Management-failure, Management-failure, Operators error, Maintenance, Explosion, Damage, Fire, Release, Pollution/Contamination, Evacuation, Fire fighting/Emergency response
General accident information	
Class/Quality	***
Year	2002
Summary	Oil leak in heater, which runs On natural gas causing fire in Flue-gas stack, evacuation and 1 casualty
Country	USA
Activity	PROCESSING
Location	REFINERY
Chemicals	Natural gas (pressurized), Oil n.o.s.
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Release, Fire, Fire fighting/Emergency response, Fire fighting/Emergency response, Evacuation

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	**
Year	2002
Summary	Equipment failed at natural Gas processing plant causing Explosion and fire which Destroyed building housing
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized), Propane
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Defective-working, Explosion, Collapse/Destroy, Damage, Fire, Fire fighting/Emergency response
General accident information	
Class/Quality	***
Year	2002
Summary	During maintenance on a high perssure Flare line at a gas processing plant Explosions occurred causing fire and 7 casualties
Country	MAL
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Hydrocarbons (gas), Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	4 / 3
Occurrences or events	Maintenance, Repair, Explosion, Fire, Fire fighting/Emergency response, Fire fighting/Emergency response
General accident information	
Class/Quality	***
Year	2001
Summary	Hydraulic oil spilled from broken lines feeding Hot steel press and ignited causing major fire, Black smoke and 1 casualty
Country	USA
Activity	PROCESSING
Location	FACTORY
Chemicals	Air, Hydraulic oil, Natural gas (pressurized), Oxygen (gas), Propane
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Human-operations, Break, Release, Ignition, Fire, Smoke-emission, Evacuation, Safety-measures, Fire fighting/Emergency response

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	**
Year	2001
Summary	Fire at sweet gas production Plant caused evacuation of the Plant
Country	CDN
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Fire, Block-of-system, Evacuation, Fire fighting/Emergency response
General accident information	
Class/Quality	***
Year	2001
Summary	Gas line ruptured when workers Were performing a routine Clean-out of sweet gas line Causing explosion and fire
Country	CDN
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Maintenance, Clean, Overpressure, Burst/Rupture, Release, Ignition, Explosion, Fire, Damage, Safety-measures, Fire fighting/Emergency response, Block-of-system, Block-of-system
General accident information	
Class/Quality	**
Year	2001
Summary	2 natural gas lines were lit And inserted into kiln during Pre-heat, start-up procedure Causing fire and explosion
Country	USA
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Human-operations, Heating, Fire, Remove, Wrong-action, Ignition, Explosion

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	***
Year	2001
Summary	During routine maintenance work on flare line At refinery gas leak occurred at desulphurising Unit caused 6 casualties
Country	KWT
Activity	PROCESSING
Location	REFINERY
Chemicals	Natural gas (pressurized), Petroleum
Cause	Unknown-cause
Fatalities/Injuries	1 / 6
Occurrences or events	Maintenance, Release
General accident information	
Class/Quality	***
Year	2000
Summary	Closure of emergency shut-down Valve, due to loss of Instrument air, caused valves To relieve gas to atmosphere
Country	AUS
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	System-failure, Release, Wrong-position, Overpressure, System-operations, Release, Pollution/Contamination
General accident information	
Class/Quality	***
Year	2000
Summary	A lightning strike during an Electrical storm affected Control systems at processing Facility, resulting in release
Country	AUS
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Natural-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Lightning, Block-of-system, Release, Safety-measures, Safety-measures

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	***
Year	2000
Summary	Natural gas pipeline ruptured Causing release, explosion, Fire at 2 chemical tanks and Shut down of plant
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Glycol, Methanol, Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Burst/Rupture, Release, Explosion, Fire, Block-of-system, Safety-measures, Block-of-system, Fire fighting/Emergency response, Fire fighting/Emergency response
General accident information	
Class/Quality	****
Year	1999
Summary	When operators attempted to Shut down boiler an explosion Occurred causing fire and at Least 3 casualties
Country	AUS
Activity	PROCESSING
Location	POWER STATION/PLANT
Chemicals	Natural gas (pressurized), Steam
Cause	Management-failure
Fatalities/Injuries	1 / 3
Occurrences or events	Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Defective-working, Release, Explosion, Physical-explosion, Burst/Rupture, Blow-away, Damage, Blow-away, Fire, Smoke-emission, Disperse/Spread, Abnormal conditions, Management-failure, Management-failure
General accident information	
Class/Quality	***
Year	1999
Summary	Water leaked into natural gas Line froze and ruptured the Pipe causing explosion, fire And 1 casualty
Country	USA
Activity	PROCESSING
Location	REFINERY
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Penetrate/Puncture, Clog, Burst/Rupture, Explosion, Fire, Blow-away, Smoke-emission, Stench-emission, Fire fighting/Emergency response

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	*
Year	1998
Summary	A metering unit of the natural Gas distribution station was Rocked by the explosion and Caught fire
Country	RUS
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Explosion, Fire
General accident information	
Class/Quality	**
Year	1998
Summary	An explosion and a fire was Apparently caused by violation Of safety rules during repair Work, causing 5 casualties
Country	UA
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 4
Occurrences or events	Operators error, Maintenance, Explosion, Fire, Fire fighting/Emergency response
General accident information	
Class/Quality	*****
Year	1998
Summary	During purging pipelines an Explosion occurred destroying Separator, tanks & vehicles Causing 4 casualties
Country	USA
Activity	PROCESSING
Location	STORAGE/DEPOT
Chemicals	Crude oil, Natural gas (pressurized), Natural gas (pressurized), Oxygen (gas)
Cause	Management-failure
Fatalities/Injuries	4 / 1
Occurrences or events	Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Management-failure, Purging, Purging, System-operations, Human-operations, Wrong-action, Human-operations, No-action, Purging, Overpressure, Human-operations, Safety-measures, Overpressure, Human-operations, Safety-measures, Human-operations, Overpressure, Purging, Human-operations, Mechanical failure, Overpressure, Burst/Rupture, Release, Ignition, Explosion, Fireball, Collapse/Destroy, Burst/Rupture, Release, Ignition, Fire, Safety-measures, Emergency-stop, Safety-measures, Safety-measures, Fire fighting/Emergency response, Fire fighting/Emergency response

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * * * *
Year	1997
Summary	During start-up of the furnace Of a crude oil distillation Unit an explosion occurred Damaging the furnace
Country	NL
Activity	PROCESSING
Location	REFINERY
Chemicals	Inflammable gas, Natural gas (pressurized), Natural gas (pressurized)
Cause	Management-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Management-failure, Management-failure, Management-failure, Defective-working, Human-operations, Defective-working, Repair, Human-operations, System-operations, System-operations, Replace, System-operations, Abnormal conditions, Wrong-composition, Stench-emission, Emergency-stop, Explosion, Burst/Rupture, Fall
General accident information	
Class/Quality	* * *
Year	1997
Summary	Blown gasket of pump caused Release of natural gas, fire, 2 explosions destroying Cooling tower & pump house
Country	USA
Activity	PROCESSING
Location	WINNING AREA
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Blow-away, Release, Ignition, Fire, Explosion, Fire, Block-of-system, Fire fighting/Emergency response
General accident information	
Class/Quality	*
Year	1997
Summary	Operations at gas boosting Station resumed immediately After blaze was brought under Control
Country	KWT
Activity	PROCESSING
Location	PUMPSTATION
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Fire, Fire fighting/Emergency response

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * *
Year	1997
Summary	Contractors investigating a Leak on a gas main, nearby Welding caused ignition, Explosion and 9 casualties
Country	GB
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 9
Occurrences or events	Repair, Welding/Cutting, Release, Groundwork, Ignition, Explosion, Evacuation
General accident information	
Class/Quality	* * *
Year	1996
Summary	During tempering oven for aluminium sections an Explosion occurred causing destruction of plant And 2 casualties
Country	F
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	System-operations, Explosion, Blow-away, Collapse/Destroy
General accident information	
Class/Quality	* * * *
Year	1995
Summary	A mix of natural gas and air ignited in a tunnel Furnace causing an explosion, large property Damage and 3 casualties
Country	D
Activity	PROCESSING
Location	FACTORY YARD
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 3
Occurrences or events	Damage, Burst/Rupture, Get-loose/Lose, Release, Wrong-composition, Ignition, Explosion, Fire, Block-of-system

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * *
Year	1995
Summary	Due to rupture of outer steel Jacket & 2 telescopic jackets of a gasometer Of a gasometer were damaged causing big release Of blast furnace gas and water and 6 casualties
Country	D
Activity	PROCESSING
Location	FACTORY
Chemicals	Cokes gas, Inflammable gas, Natural gas (pressurized), Oil n.o.s., Water
Cause	Unknown-cause
Fatalities/Injuries	1 / 5-6
Occurrences or events	Burst/Rupture, Release, Damage, Collapse/Destroy, Release, Release, Ignition, Fire, Emergency-stop, Safety-measures, Traffic-interruption, Fire fighting/Emergency response, Remove, Clean, Safety-measures, Safety-measures
General accident information	
Class/Quality	* * *
Year	1994
Summary	Series of dust explosions due to large amounts Of dust in a furniture manufacturing facility Caused 6 casualties
Country	USA
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized), Oil n.o.s., Wood saw dust
Cause	Management-failure
Fatalities/Injuries	2 / 4
Occurrences or events	Management-failure, Management-failure, Release, Release, Ignition, Ignition, Unclean-working-area, Dust-explosion
General accident information	
Class/Quality	* *
Year	1994
Summary	Due to welding works on pipes an explosion Occurred at a gas installation causing fire And 4 casualties
Country	WAN
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 3
Occurrences or events	Welding/Cutting, Explosion, Fire

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	***
Year	1994
Summary	Methanol plant was seriously Damaged by fire after natural Gas feed pipeline leaked and Caught fire
Country	NL
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Methanol, Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Break, Release, Fire, Traffic-interruption, Fire fighting/Emergency response
General accident information	
Class/Quality	****
Year	1994
Summary	Gas explosion in power heating Plant caused damage and 87 Casualties
Country	F
Activity	PROCESSING
Location	POWER STATION/PLANT
Chemicals	Hydrogen chloride, Natural gas (pressurized), Poly chlorinated biphenyls, Poly chlorinated terphenyls, Potassium, Sulphuric acid (sfa)
Cause	Human-failure
Fatalities/Injuries	2 / 85
Occurrences or events	System-operations, Human-operations, Release, Safety-measures, Ignition, Explosion, Blast-wave, Fire, Fire fighting/Emergency response, Evacuation, Safety-measures
General accident information	
Class/Quality	***
Year	1993
Summary	During maintenance at a gas Compression plant of platform Explosion and fire caused at Least more than 12 casualties
Country	YV
Activity	PROCESSING
Location	WINNING AREA
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	10-11 / >1
Occurrences or events	Maintenance, Human-operations, Defective-working, Explosion, Fire, Collapse/Destroy, Blast-wave, Fire fighting/Emergency response

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	***
Year	1992
Summary	Leakage of natural gas at a Natural gas plant
Country	YV
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 14-34
Occurrences or events	Release, Ignition, Fire, Explosion, Damage, Safety-measures
General accident information	
Class/Quality	***
Year	1991
Summary	Truck damaged (gas?)pipeline & Explosion & fire occurred Causing 332 casualties and Considerable damage
Country	MEX
Activity	PROCESSING
Location	REFINERY
Chemicals	Natural gas (pressurized), Oil n.o.s.
Cause	Human-failure
Fatalities/Injuries	3 / 329
Occurrences or events	Collision, Drive, Emergency-stop, Explosion, Fire, Fire fighting/Emergency response, Release
General accident information	
Class/Quality	***
Year	1990
Summary	An explosion occurred at a gas Field purification plant Causing a fire
Country	PK
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	2 / 41
Occurrences or events	Explosion, Fire
General accident information	
Class/Quality	***
Year	1990
Summary	Explosion in gas separation plant when an Electrical switch on compressor was restarted Causing 2 casualties
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized), Natural gas liquids (ngl), Water
Cause	Unknown-cause
Fatalities/Injuries	1 / 2
Occurrences or events	Explosion, Remove, Switch

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	***
Year	1989
Summary	During digging a backhoe broke A natural gas line causing an Explosion, fire and at least 29 casualties
Country	USA
Activity	PROCESSING
Location	POWER STATION/PLANT
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	>2 / 25-27
Occurrences or events	Collision, Explosion, Fire, Fire fighting/Emergency response, Heating, Physical effects
General accident information	
Class/Quality	**
Year	1988
Summary	A leakage at a pipeline caused An explosion and a blast
Country	DZ
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	18 / 8
Occurrences or events	Blast-wave, Explosion, Release
General accident information	
Class/Quality	*****
Year	1988
Summary	Fire and explosions in a Rocket fuel plant caused (plant) evacuation and 372 Casualties
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Ammonium perchlorate, Ammonium perchlorate, Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	2 / 372
Occurrences or events	Blast-wave, Burst/Rupture, Detonation, Evacuation, Explosion, Explosion, Fire, Fire fighting/Emergency response, Ignition, Welding/Cutting
General accident information	
Class/Quality	
Year	1987
Summary	Release gas during maintenance Of compressor
Country	NL
Activity	PROCESSING
Location	PUMPSTATION
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Block-of-system, Dismount/Disconnect, Maintenance, Release, Wrong-action

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * * *
Year	1986
Summary	During de-gassing a pipeline A static electr. spark from Plastic clothes ignited gas Cloud causing 1 casualty
Country	NL
Activity	PROCESSING
Location	LABORATORY
Chemicals	Natural gas (pressurized)
Cause	Natural-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Explosion, Human-operations, Ignition, Mount/Connect, Release, Safety-measures, Static-electricity, Stench-emission
General accident information	
Class/Quality	
Year	1986
Summary	Fire in factory caused by Defective electric motor Igniting plastic products
Country	GB
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized), Plastic products
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Burst/Rupture, Collapse/Destroy, Defective-working, Explosion, Fire, Fire fighting/Emergency response, Ignition, Overheating, Smoke-emission
General accident information	
Class/Quality	* * * *
Year	1986
Summary	Worker rendered unconscious by Hydrogen sulphide gas and fell Into settling water rig tank
Country	CDN
Activity	PROCESSING
Location	WINNING AREA
Chemicals	Hydrogen sulphide (h2s), Natural gas (pressurized), Water
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Fall, Sampling, Wrong-composition, Wrong-position

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	
Year	1985
Summary	Explosion in a boiler during Attempts to light the Auxiliary boiler burner
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 2
Occurrences or events	Defective-working, Explosion, Human-operations, Ignition, Release
General accident information	
Class/Quality	
Year	1983
Summary	Explosion during start up of Boiler
Country	KWT
Activity	PROCESSING
Location	REFINERY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Explosion, Human-operations
General accident information	
Class/Quality	
Year	1983
Summary	Explosion in gas compression Plant
Country	YV
Activity	PROCESSING
Location	REFINERY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Explosion
General accident information	
Class/Quality	
Year	1982
Summary	Gas explosion in smoke gas Canal of gasturbine
Country	NL
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Defective-working, Explosion, Ignition, Release

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	
Year	1982
Summary	Explosion and fire in Compressor building
Country	USA
Activity	PROCESSING
Location	BUILDING
Chemicals	Natural gas (pressurized)
Cause	Human-failure Technical-failure
Fatalities/Injuries	3 / 2
Occurrences or events	Defective-working, Explosion, Fire, Human-operations, Human-operations, Release
General accident information	
Class/Quality	
Year	1981
Summary	Gas explosion in hardening Furnace
Country	NL
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Blow-away, Explosion, Fire, Human-operations
General accident information	
Class/Quality	* * *
Year	1981
Summary	Rupture of pipeline during routine maintenance Of gas processing plants caused fire, explosion And at least 6 casualties
Country	USA
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 6-7
Occurrences or events	Burst/Rupture, Explosion, Fire, Fire fighting/Emergency response, Ignition, Maintenance, Release

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	**
Year	1981
Summary	Explosion of gasometer in gas-Factory caused damage to Hospital and 10 casualties
Country	E
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	2 / 8
Occurrences or events	Explosion, Fire, Evacuation
General accident information	
Class/Quality	***
Year	1980
Summary	Explosion steam boiler in Factory caused considerable Damage
Country	NL
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Ammonia solution <35%, Hydrocarbons (pressurized), Natural gas (pressurized), Waste oil
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Defective-working, Ignition, Explosion
General accident information	
Class/Quality	
Year	1979
Summary	Gas explosion in furnace
Country	NL
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized), Zinc oxide
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Defective-working, Human-operations, Ignition, Explosion, Fire

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * *
Year	1979
Summary	Failure during start up by too Low flow
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Ammonia, Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Defective-working, Incompetent, Incompetent, Overheating, Crack, Release
General accident information	
Class/Quality	
Year	1979
Summary	Explosion and fire of soap Factory
Country	B
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Release, Disperse/Spread, Ignition, Explosion, Fire, Blow-away
General accident information	
Class/Quality	
Year	1978
Summary	Explosion in synthetic natural Gas plant
Country	USA
Activity	PROCESSING
Location	TANKYARD/TANK FARM
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	2 / 1
Occurrences or events	Explosion
General accident information	
Class/Quality	
Year	1978
Summary	Gas explosion in gas factory Caused 10 casualties
Country	IND
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Coal gas, Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	4 / 6
Occurrences or events	Repair, Welding/Cutting, Ignition, Explosion

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * *
Year	1977
Summary	Explosion and fire involving Preheat furnace of catalytic Cracking units (fcc)
Country	USA
Activity	PROCESSING
Location	REFINERY
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Replace, Short-circuiting, El-power-brake, Block-of-system, Wrong-action, Recover, Wrong-action, Release, Ignition, Explosion, Fire
General accident information	
Class/Quality	
Year	1977
Summary	Fire in central heating Room caused 1 casualty
Country	NL
Activity	PROCESSING
Location	BUILDING
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Wrong-action, Release, Ignition, Ignition, Fire
General accident information	
Class/Quality	
Year	1977
Summary	Back fire of furnace by Ignition
Country	NL
Activity	PROCESSING
Location	REFINERY
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Defective-working, Ignition, Fire
General accident information	
Class/Quality	* * *
Year	1977
Summary	Aboveground fuel gas line Failed causing a vapour cloud Which was ignited by a motor Vehicle
Country	AS
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Mechanical failure, Burst/Rupture, Release, Ignition, Explosion

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	
Year	1977
Summary	Explosion in gas-works caused Fire and 2 casualties
Country	CDN
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized), Sulphur dioxide, Sulphur molten
Cause	Unknown-cause
Fatalities/Injuries	2 / 1
Occurrences or events	Maintenance, Release, Ignition, Explosion, Fire, Fire fighting/Emergency response, Release, Remove
General accident information	
Class/Quality	* * * *
Year	1977
Summary	Wrongly dismantling of an Actuator caused very large Accident and at least 91 casualties
Country	MEX
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Hydrochloric acid, Natural gas (pressurized), Vinylchloride (monomer) (vcn), Vinylchloride (monomer) (vcn), Vinylchloride (monomer) (vcn)
Cause	Human-failure
Fatalities/Injuries	1 / 93
Occurrences or events	Chemical reaction, Maintenance, Maintenance, Repair, Remove, Dismount/Disconnect, Wrong-action, Blowout, Release, Emergency-stop, Fire fighting/Emergency response, Not-working, Defective-working, Fire fighting/Emergency response, Solidify/Icing, Overpressure, Blowout, Disperse/Spread, Penetrate/Puncture, Evacuation, Traffic-interruption, Ignition, Fire, Fire fighting/Emergency response, Safety-measures, Bleve, Fireball, Explosion, Bleve, Fireball, Blow-away, Burst/Rupture, Blow-away, Collision, Blow-away, Collision, Blow-away, Blow-away, Collision, Blow-away, Burst/Rupture, Release, Human-operations, Defective-working, Burst/Rupture, Blow-away, Fall, Blow-away, Collision, Fire, Burst/Rupture, Blow-away, Burst/Rupture, Blow-away, Collision, Physical effects, Blow-away, Fire, Burst/Rupture, Release, Smoke-emission, Natural event, Chemical reaction, Damage
General accident information	
Class/Quality	
Year	1976
Summary	Rupture of gaspipeline by Explosion by blower
Country	D
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Burst/Rupture, Release, Fire

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	
Year	1976
Summary	Vapour turbine failed causing gas Release and fire in gas purification Terminal
Country	AUS
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Carbon dioxide (gas), Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Defective-working, Release, Ignition, Fire

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * * *
Year	1976
Summary	Explosion of mixture of Natural gas and air damaged Tank causing release of Chlorine & at least 1 casualty
Country	USA
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Air, Chlorine, Chlorine hydrate, Natural gas (pressurized), Soda lime
Cause	Human-failure
Fatalities/Injuries	1 / >1
Occurrences or events	Penetrate/Puncture, Wrong-composition, Static-electricity, Ignition, Explosion, Blow-away, Fall, Penetrate/Puncture, Release, Disperse/Spread, Pollution/Contamination, Evacuation, Chemical reaction, Chemical reaction
General accident information	
Class/Quality	* *
Year	1976
Summary	During start up compressor Control valves broke and Releasing gas exploded causing An explosion and 3 casualties
Country	D
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Technical-failure
Fatalities/Injuries	1 / 2
Occurrences or events	Damage, Human-operations, Break, Release, Explosion
General accident information	
Class/Quality	
Year	1975
Summary	Gas explosion in furnace
Country	J
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Human-operations, Wrong-composition, Ignition, Detonation
General accident information	
Class/Quality	
Year	1974
Summary	Explosion in boiler
Country	NL
Activity	PROCESSING
Location	FACTORY
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Explosion

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	
Year	1974
Summary	Explosion in boiler during Switch from gas to oil
Country	GB
Activity	PROCESSING
Location	FACTORY
Chemicals	Fuel oil, Natural gas (pressurized), Rubber
Cause	Human-failure
Fatalities/Injuries	1 / 2
Occurrences or events	Switch, Ignition, Explosion
General accident information	
Class/Quality	
Year	1973
Summary	Failure of start up heater Tube
Country	GB
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Natural gas (pressurized), Synthesis gas
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Overheating, Burst/Rupture, Release, Ignition, Explosion, Fire, Fire fighting/Emergency response
General accident information	
Class/Quality	
Year	1970
Summary	Failure of reformer outlet Header
Country	CDN
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Natural gas (pressurized), Synthesis gas
Cause	Technical-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Burst/Rupture, Release, Ignition, Fire
General accident information	
Class/Quality	
Year	1968
Summary	Gas fire in compressor station
Country	USA
Activity	PROCESSING
Location	PUMPSTATION
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Burst/Rupture, Release, Ignition, Fire, Human-operations

NATURAL GAS (PRESSURIZED) - PROCESSING

General accident information	
Class/Quality	* * * *
Year	1950
Summary	Due to polluted burners of a Flare system big amounts of H2s caused poisoning and 342 casualties
Country	MEX
Activity	PROCESSING
Location	REFINERY
Chemicals	Hydrogen sulphide (h2s), Hydrogen sulphide (h2s), Monoethanolamine, Monoethanolamine, Natural gas (pressurized), Sulphur dioxide
Cause	Technical-failure
Fatalities/Injuries	22 / 320
Occurrences or events	Purify, Chemical reaction, Overflow, Wrong-composition, Pollution/Contamination, Defective-working, Defective-working, Release, Pollution/Contamination
General accident information	
Class/Quality	
Year	????
Summary	Gas explosion in firebox of Furnace
Country	??
Activity	PROCESSING
Location	CHEMICAL FACTORY
Chemicals	Natural gas (pressurized)
Cause	Human-failure
Fatalities/Injuries	1 / 1
Occurrences or events	Wrong-action, Human-operations, Overfill/Overload, Ignition, Explosion
General accident information	
Class/Quality	* *
Year	
Summary	Fire at gas plant was quickly extinguished
Country	AUS
Activity	PROCESSING
Location	GAS (PROCESS) PLANT
Chemicals	Natural gas (pressurized)
Cause	Unknown-cause
Fatalities/Injuries	1 / 1
Occurrences or events	Fire, Fire fighting/Emergency response