

Leak, Hazard, and Emergency Response

Natural Gas
 Petroleum Gas
 Petroleum Liquids
 Anhydrous Ammonia
 Carbon Dioxide
 Ethanol
 Hydrogen Gas
 Sour Gas (H2S)
 Sour Crude Oil (H2S)
 Liquids & Natural Gas

INDICATIONS OF A LEAK									
See - liquid pooling on the ground			X			X		X	X
See - a white vapor cloud that may look like smoke		X		X	X				
See - fire coming out of or on top of the ground	X	X					X	X	X
See - dirt blowing from a hole in the ground	X	X		X	X		X	X	X
See - a sheen on the surface of water		X	X						X
See - an area of frozen ground in the summer	X	X		X	X		X	X	X
See - an unusual area of melted snow in the winter	X	X			X		X	X	X
See - an area of dead vegetation	X	X	X	X	X	X	X	X	X
See - bubbling in pools of water	X	X		X	X		X	X	X
Hear - a loud roaring sound like a jet engine	X	X		X	X		X	X	X
Hear - a hissing or whistling noise	X	X		X	X		X	X	X
Smell - an odor like rotten eggs or a burnt match	(1)	(1)						X	X
Smell - an odor like petroleum liquids or gasoline		X	X			X			X
Smell - an irritating and pungent odor				X				X	X
HAZARDS OF A RELEASE									
Highly flammable and easily ignited by heat or sparks	X	X	X			X	X	X	X
Will displace oxygen and can cause asphyxiation	X	X		X	X		X	X	X
Vapors are heavier than air and will collect in low areas		X	X	X	X	X		X	X
Contact with skin may cause burns, injury or frostbite		X	X	X	X	X	X	X	X
Initial odor may be irritating and deaden the sense of smell								X	X
Toxic and may be fatal if inhaled or absorbed through skin				X				X	X
Vapors are extremely irritating and corrosive				X				X	X
Fire may produce irritating and/or toxic gases	X	X	X	X		X	X	X	X
Runoff may cause pollution			X	X		X			X
Vapors may form an explosive mixture with air	X	X	X			X	X	X	X
Vapors may cause dizziness or asphyxiation without warning	(1)	(1)			X		X	X	(1)
Is lighter than air and can migrate underground and into enclosed spaces	X						X		X
EMERGENCY RESPONSE									
Avoid any action that may create a spark	X	X	X			X	X	X	X
Do NOT start vehicles, switch lights or hang up phones	X	X	X			X	X	X	X
Evacuate the area on foot in an upwind and/or uphill direction	X	X	X	X	X	X	X	X	X
Alert others to evacuate the area and keep people away	X	X	X	X	X	X	X	X	X
From a safe location, call 911 to report the emergency	X	X	X	X	X	X	X	X	X
Call the pipeline operator and report the event	X	X	X	X	X	X	X	X	X
Wait for emergency responders to arrive	X	X	X	X	X	X	X	X	X
Do NOT attempt to operate any pipeline valves	X	X	X	X	X	X	X	X	X
Take shelter inside a building and close all windows				(2)	(2)			(2)	(2)

- (1) The majority of these products are naturally odorless and only certain pipeline systems may be odorized
 (2) Sheltering in place is an alternative to evacuation when the products are toxic or the risk of fire is very low