Potential Hazards Associated with Pipeline Leaks

The following chart outlines potential hazards associated with the release of specific products that may be transported by Kinder Morgan. Each product has unique properties and hazards.

Product	Description	Fire Hazard	Health Hazard	Response (Extinguishing Method)
Benzene - Typical	Colorless liquid, characteristic odor	Extremely flammable. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if swallowed, inhaled or absorbed through skin	Dry chemical or foam. Cover liquid spills with foam.
Butane - Typical (Butane, Normal Butane, Isobutane Mix)	Colorless liquid, characteristic odor	Flammable gas. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical, carbon dioxide (CO2)
CO2 - Typical	Colorless, odorless gas – odor like rotten eggs if H2S is present.	Nonflammable gas	Avoid direct contact with liquid product. Can cause frostbite. Vapors are nontoxic but can serve as an asphyxiant.	Isolate the area and monitor oxygen levels
Crude - Heavy	Amber to black liquid with a mild hydrocarbon odor – like rotten eggs if H2S is present	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical, foam
Crude - Sour	Amber to black liquid with a mild hydrocarbon odor – like rotten eggs if H2S is present	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical, foam
Crude - Sweet	Amber to black liquid with a mild hydrocarbon odor – like rotten eggs if H2S is present	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical, foam
Denatured Ethanol – Typical	Colorless, water white liquid, with a mild fragrant odor	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources	Harmful or fatal if inhaled or absorbed through skin	Alcohol resistant foam, dry chemical or carbon dioxide
Ethane - Typical	Colorless, odorless gas	Flammable gas. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical, carbon dioxide (CO2)
Ethane/Propane Mix – Typical (E/P Mix)	Colorless, odorless gas	Flammable gas. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical, foam or carbon dioxide (CO2)
Gasoline – Typical (Unleaded Gasoline)	Clear (may be dyed) liquid with a gasoline odor	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical, foam, carbon dioxide (CO2) or water fog
High Sulfur Diesel – Typical (Petroleum hydrocarbons)	Clear (may be dyed) liquid with a hydrocarbon odor	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if swallowed, inhaled or absorbed through skin	Dry chemical, foam, carbon dioxide (CO2) or water fog. Water may be ineffective but should be used to keep fire exposed containers cool.
Kerosene - Typical	Clear (may be dyed) liquid with a petroleum or solvent odor	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical, foam or carbon dioxide (CO2). For larger fires, use water spray or fog.
Low Sulfur and Ultra Low Sulfur Diesel - Typical	Clear yellow liquid with a petroleum odor	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical, foam, carbon dioxide (CO2) or water fog
Methanol – Typical	Colorless, mild characteristic odor	Highly flammable, keep away from heat, sparks, open flames and other ignition sources	Harmful or fatal if swallowed, inhaled or absorbed through skin	Alcohol resistant foam, dry chemical or carbon dioxide
Natural Gas (Compressed Gas, Residue gas, sales gas) – Typical	Colorless, odorless gas. Hydrocarbon odor - like rotten eggs or garlic-like, if mercaptan is present.	Flammable gas. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin. Vaporizing gas may cause frostbite.	Dry chemical or carbon dioxide (CO2)
Natural Gas Condensate - Typical	Colorless liquid with a hydrocarbon odor – like rotten eggs if mercaptan is present.	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical, foam or carbon dioxide (CO2)
Propane - Typical (HD-5, Liquefied Propane Gas, LP-Gas, LPG)	Colorless, odorless liquefied gas	Flammable gas. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if inhaled or absorbed through skin	Dry chemical or carbon dioxide (CO2)
Transmix - Typical (T-034; T-035; OHSDU545)	Pink to bronze liquid with a gasoline odor	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if swallowed, inhaled or absorbed through skin	Dry chemical, foam, carbon dioxide (CO2) or water fog
Turbine Fuel - Typical	Clear watery-white liquid with a faint hydrocarbon odor	Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources.	Harmful or fatal if swallowed, inhaled or absorbed through skin	Dry chemical, foam, carbon dioxide (CO2), water fog or vaporizing liquid type extinguishing agents

For additional information about the potential hazards and safety recommendations visit **www.kindermorgan.com/public_awareness/AdditionalInformation/erg**

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