Securing Marine, Rail, and Road Offloading Sites

Keeping a SafEye on your safety

Flammable and toxic products and materials are often transported by sea, rail, or road. When they are loaded or offloaded, there is an increased risk of spillage or leakages. It is imperative therefore that handlers pay careful attention to avoid the accidental release and ignition of flammable and toxic gases.

To a varying degree, combustion and toxic hazards are always present in loading and offloading processes and facilities. This requires detecting flammable and toxic gas leaks quickly and to suppress fires without delays.



Challenges

Many hazards are associated with the loading and unloading flammable and toxic substances. Their severity depends on several factors, including:

- Ambient conditions that are unsuitable for the materials being loaded/offloaded
- Heavy traffic can compromise visibility and lead to impacts that harm employees
- Spill and open fires
- Static electricity and lightning that can act as an ignition source
- Releasing methanol from pressurized piping can cause instant liquid flashing and vapor generation
- In gravity-transfer systems, methanol leakage could result in liquid pooling and less vapor generation

Solutions

Spectrex offers several products for detecting and preventing fires and hazards in sea, rail, or road facilities where hazardous materials are loaded and offloaded. They are highly reliable and approved for safety integrity levels.



40/40 series flame detectors - field-proven, reliable detectors that provide the most comprehensive protection against hydrocarbon-based fuel and gas fires, hydroxyl and hydrogen fires, and metal and inorganic fires.



Quasar 900 - open-path detection system that provides innovative continuous IR technology monitoring for combustible hydrocarbon gases at very low concentrations, ensuring reliable and accurate protection.



SafEye Quasar 950 open-path H₂S and Quasar 960 NH₃ gas detectors - open-path toxic gas detectors for hydrogen sulfide and ammonia, very common toxic gases that are transported frequently from these facilities.

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