

FACILITY-SPECIFIC RISKS

Tank Farms

Tank farms store hazardous materials and are susceptible to explosions and fires. They contribute to continued air pollution while dislodgement of tanks from hurricanes, floods, or other natural hazards may cause catastrophic leaks.

Gas and Oil Pipelines

Pipelines carry hazardous liquids (like petroleum) and natural gasses; they can have both acute and long-term implications when a leak or spill occurs. Both gas and oil pipelines can contribute to air contamination in the event of a fire or explosion. They may also cause further environmental damage to waterways, soils, wildlife, and surrounding communities. While some pipelines are underground, those that are aboveground are also vulnerable to breakage with heavy rains and floods.

Petroleum Industries

Common hazards in the petroleum industry are fires and explosions due to the nature of the chemicals and chemical processes occurring in facilities. These fires can sometimes be deadly, or have far-reaching impacts on surrounding communities (see PES Refinery on page 9). Air and water pollution is of significant concern, and workers are also continuously exposed to health risks.

Railways, Roads, and Ports

Transportation of hazardous materials via road, train, or freight pose a risk of spillage and contamination if an accident occurs during transport. Trains are at risk of derailment, leading to ruptured tank cars, spills, and fires or explosions. Accidents like collisions or overturns of tanker trucks on roads pose a unique risk due to their often immediate proximity to other vehicles, particularly on highways or in densely populated areas. Freight poses a high risk to populated transport corridors and water bodies.

Chemical Facilities

Water contamination can occur at chemical facilities when chemicals leak or are not disposed of properly, while air pollution poses a significant risk to communities living near facilities due to continued exposure to toxic chemicals. Like petroleum facilities, chemical facilities are at high risk of explosions, which pose serious threats to human health and the environment.

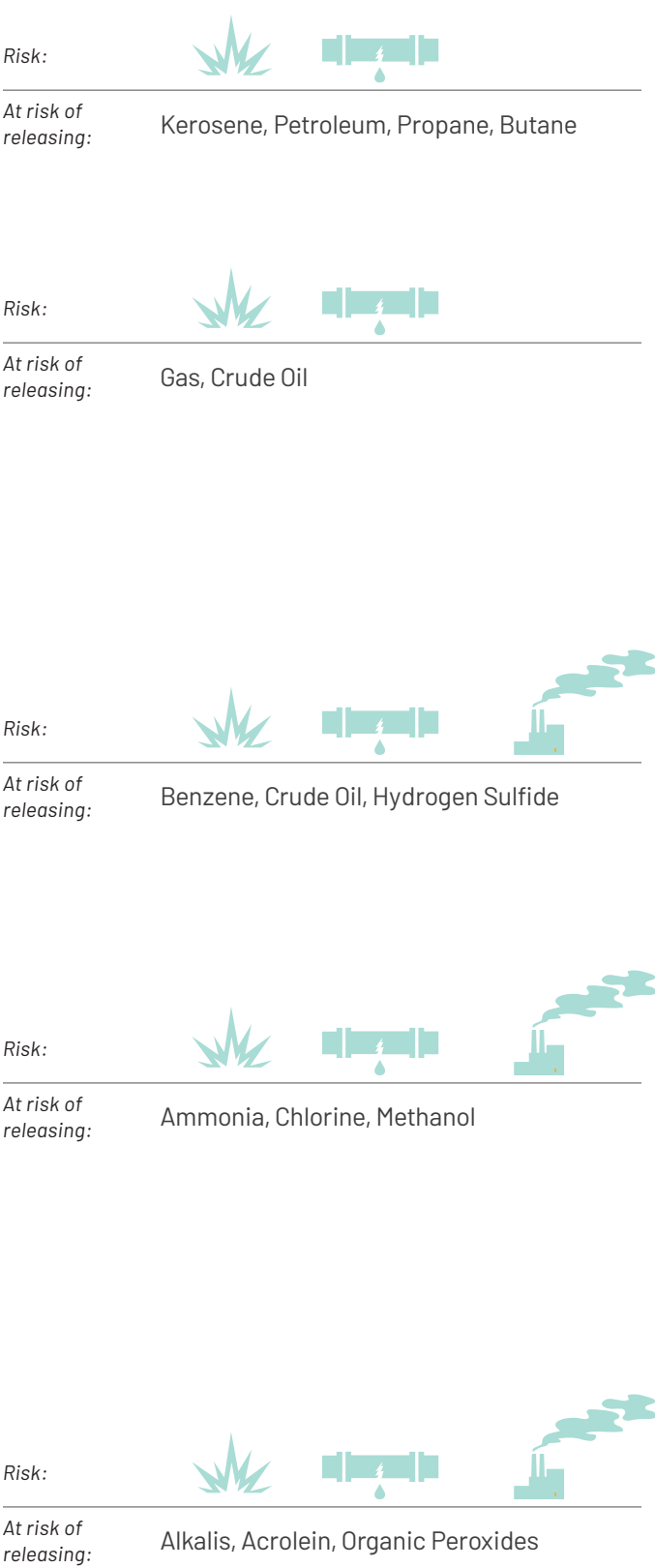


Figure 17. Chart showing selected examples of potential pollutants by source type. Source: OLIN