

Identified Flying Objects

Unmanned aerial vehicles or systems (UAVs or UASs), such as drones, are now widely available for purposes ranging from photography and entertainment to deliveries and defense. UAVs are a valuable technology for facilities in the chemical process industries (CPI), which can use them to conduct visual inspections and monitor equipment and processes. Concerns remain, however, over the use of drones at industrial sites due to the risk of collisions with equipment, which could cause damage, fire, or explosions.

UAVs are not the only airborne threat to the CPI. Local festivals or events often mark occasions with helium balloons, hot air balloons, fire balloons (*i.e.*, sky lanterns), or fireworks, which can unintentionally land where flammable or combustible materials are stored or handled. Fire balloons are of particular concern because

they can travel much further distances than fireworks, and they can introduce an unexpected and unseen source of ignition onto a facility's grounds.

In one instance, a hot air balloonist was driven toward a site and had to make an emergency landing inside the plant (April 2007 Beacon). Effective emergency response training, practice, and drills equipped site personnel to respond to the emergency situation, despite its unexpected and unusual nature.

While helium balloons do not present a direct fire hazard, they may collide with uninsulated overhead power lines and cause short circuits and other damage. This is a common occurrence when foil decorative balloons made of polyethylene terephthalate (PET) are released due to their metallic surface.



What Can You Do?

- When you walk around your facility doing typical safety checks, also look up in the sky, and report any threats you might see.

- Be especially vigilant around holidays and festivities that are traditionally celebrated with fireworks or balloons, such as Independence Day or a local fair.

- If you are aware of CPI facilities or other stores of flammable material in your community, advise neighbors planning activities involving fireworks or drones of the hazards.

- If your facility uses drones for inspection or other tasks, ensure the activity is permitted in the same manner as other nonroutine tasks.

Gifts come from above, but so do hazards!

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