



## Priority Learning Moment

### Industry-Submitted Incident Notification

#### IN-006 | High Hazard Exposure: Hazardous Atmosphere/ Environment

**Incident:** Exposure to chlorine gas due to chemical reaction

#### Incident Description:

A chemical service provider was filling the sodium hypochlorite (bleach) tote. As they began to fill the tote a chemical reaction occurred leading to a 5-gallon spill. It was determined that a trace amount of H<sub>2</sub>S scavenger was in the hose used to transfer the bleach, and the result was chlorine gas being released in an exothermic reaction.



Workers removed the chemical tote from the building, as at the time they believed the smouldering was a potential fire/explosion hazard. Once removed from the shack, they contacted the service provider's chemist, who informed them of what the reaction was and instructed them to let the chemicals stabilize. Workers reported minor throat irritation.

#### Corrective Actions:

Standard operating procedures are needed addressing the cleaning of chemical hoses after each use to avoid potential for mixing of different chemicals.

When possible, use dedicated hoses for specific chemicals to reduce the likelihood of a reaction.