SAFETY ALERT: CHEMICAL / VAPOR RELEASES AT RECYCLING FACILITIES

OVERVIEW

From 2017 to 2019, the Environmental & Occupational Emergency Preparedness Team in the California Department of Public Health identified a number of chemical/vapor releases occurring at mixed recycling facilities. These releases resulted in workers breathing in the vapors.

Some workers experienced health effects, including lung irritation, shortness of breath, burning skin, nausea, and vomiting. They reportedly did not seek medical attention in any of the incidents.

EXPOSURES

In one incident, a reaction between muriatic acid and an unknown substance was identified. The health effects reported by workers were consistent with chlorine gas exposure, which is very toxic. The chemical makeup of vapors was unknown in most incidents where health effects were reported.

STEPS TO PROTECT HEALTH AT THE FACILITY

- Employers should train workers to report any job-related exposures or health effects to their supervisor so they can be provided a medical evaluation
- Provide appropriate personal protective equipment (PPE) and training on what to do during a chemical/vapor release
- Use gas and chlorine monitors with alarms to warn of a significant hazard

OUTSIDE THE FACILITY

- Provide easily accessible sorting guides for the public online and in mailings to reduce the risk of improper items in the waste stream
- Conduct outreach to local communities about health consequences to workers from improper disposal of household chemicals
REGULATIONS THAT HELP PROTECT WORKERS

**Hazard Communications**
CCR Title 8 - 5194 requires employers to tell workers about hazardous substances they are working with and train them to work safely.

[www.dir.ca.gov/Title8/5194.html](http://www.dir.ca.gov/Title8/5194.html)

**Controlling Exposures to Vapors**
CCR Title 8 - 5155 sets limits on how much of a contaminant can be in the air workers breathe.

[www.dir.ca.gov/Title8/5155.html](http://www.dir.ca.gov/Title8/5155.html)

**Injury and Illness Prevention Program**
CCR Title 8 - 3203 requires employers to develop and implement a written program for reporting, identifying, and correcting workplace hazards, including training for workers on potential hazards.

[www.dir.ca.gov/Title8/3203.html](http://www.dir.ca.gov/Title8/3203.html)

**Personal Protective Equipment (PPE)**
CCR Title 8 - 5144 requires employers to provide respirators when necessary to protect workers from airborne hazards, to make sure respirators fit properly, and to train workers on their use.

[www.dir.ca.gov/Title8/5144.html](http://www.dir.ca.gov/Title8/5144.html)

**Access to Medical and Exposure Records**
CCR Title 8 - 3204 gives workers the right to see and copy their own medical records and any records related to measuring toxic substances they may have been exposed to on the job. These records are important in determining whether an employee's health has been affected by her or his work.

[www.dir.ca.gov/Title8/3204.html](http://www.dir.ca.gov/Title8/3204.html)

*Cal/OSHA Consultation Services Branch* provides free assistance to employers to help them improve health and safety and comply with Cal/OSHA regulations.

(800) 963-9424 * InfoCons@dire.ca.gov * [www.dir.ca.gov/dosh/consultation_offices.html](http://www.dir.ca.gov/dosh/consultation_offices.html)