United Steelworkers Calls For Acid Phase-Out

The United Steelworkers (USW) announced today that it is calling for the nationwide phase-out of hydrogen fluoride alkylation units.

"Hydrogen fluoride is such a deadly component, and there are new and safer technologies available," said USW Vice President Gary Beevers, who is in charge of the union's oil sector.

"It's a matter of health and safety to us. It's a matter of money to the industry. We think they should change to a safer alternative," Beevers added.

Hydrogen fluoride is an acid used as a catalyst in the alkylation unit to make high-octane petroleum and is deadly in large amounts. The chemical turns into hydrofluoric acid when it is in contact with moisture and becomes an extremely corrosive liquid and contact poison that burns skin, tissue and eyes. It rapidly penetrates tissues and can cause systemic toxicity, damaging the heart and lungs and causing death. Under the right conditions, a large release could form a lethal plume of acid vapors that could extend for miles downwind, putting thousands of people at risk.

One-third of refineries use hydrogen fluoride. The other two-thirds use sulfuric acid as a catalyst, which also can burn skin, tissue and lungs but is somewhat less toxic. Most important, sulfuric acid has much less potential to form a deadly vapor plume extending outside the refinery.

Solid-state catalysts offer promise as an even safer alternative but are currently at the pilot plant stage and have not been used commercially yet for the alkylation process.

The USW will be discussing with the industry other alternatives to the use of hydrogen fluoride and if necessary will work through the regulatory agencies and Congress to get the issue resolved.

"We intend to pursue every avenue till we have safer units that don't endanger our refinery workers or the communities surrounding these facilities," Beevers said.

There have been three reported hydrogen fluoride release incidents in the past five months. At the USW-represented Sunoco refinery in Philadelphia, 10 contractors were exposed to hydrogen fluoride and sent to the hospital after the chemical's release from the alkylation unit on March 11. On July 19 hydrogen fluoride was released during a fire at Citgo's east refinery in Corpus Christi, Texas. One USW-represented employee remains in an intensive care unit as a result of thermal burns from the fire. At the non-union ExxonMobil refinery in Joliet, Ill., hydrogen fluoride

was released Aug. 6 from the alkylation unit and resulted in one operator suffering from hydrogen fluoride-related chemical burns.

The USW plans to work with local community environmental groups to end the use of hydrogen fluoride. A mid-September meeting between the local and international union, the Sierra Club and Citizens for Environmental Justice in Corpus Christi is planned.

In an Aug. 13 final report to the Texas Commission on Environmental Quality (TCEQ), Citgo estimated that nearly 4,000 pounds of hydrogen fluoride had been released. According to Citizens for Environmental Justice, the TCEQ records show that this quantity was the largest hydrogen fluoride release in 20 years. The group said the company did not tell citizens the dangerous nature of the fire or that potentially deadly gas had escaped. Reportedly there were citizens who experienced adverse health effects.

According to Dr. Neil Carman, chemist and Clean Air Program director for the Sierra Club, Citgo has failed to report fugitive releases of hydrogen fluoride to the EPA for the last 21 years, except for serious fires and accidents, and may be "fudging as badly as it did" with benzene tank releases it was criminally convicted of under the federal Clean Air Act.

This points to the USW's contention that refineries must report all releases to the public. The desire for transparency is one of the main areas of disagreement the union has with the American Petroleum Institute.

The USW is the largest industrial union in North America and has 850,000 members in the U.S., Canada, and the Caribbean. It represents workers employed in metals, rubber, chemicals, paper, oil refining, atomic energy and the service sector.

For more information, visit www.usw.org [1].

Source URL (retrieved on *03/26/2015 - 4:02pm*):
http://www.chem.info/news/2009/09/united-steelworkers-calls-acid-phase-out

Links:
[1] http://www.usw.org/