

hazards. Sprays and mists from high-flash-point solvents can easily ignite in the air. Summer temperatures boosted by heat-producing industrial operations can breed serious fires. Despite all warnings, numerous plants still use gasoline as a cleaning fluid or degreaser. Gasoline is meant to burn in an engine. It has no other legitimate use. Firefighters who may be called on to use vaporizing liquid fire extinguishers learn that carbon tetrachloride, chlorobromomethane, and methyl bromide are toxic at room temperatures and considerably more toxic in the heat of a fire. Solvents, particularly halogenated solvents such as carbon tetrachloride, trichloroethylene, and the Freons, need not burn to decompose. High temperature will break them down. Inert arc welding (heliarc), using argon, produces enough radiation to break down trichloroethylene vapors into phosgene and hydrochloric acid fumes. When this happens workers get sick and equipment corrodes. Except under carefully controlled conditions chlorinated solvents should not be stored in vessels made of active metals such as aluminum or magnesium. Failure to follow this rule caused a plant explosion which took the lives of 10 firemen and injured 37 others. The degree to which solvents affect insulation and parts of electrical systems depends upon the materials. Since there are hundreds of solvents on the market, there can be no single precaution which would apply in all cases. To make sure a plant uses solvents safely requires study.

MISCELLANEOUS

794 Treatment Methods for Laundry Wastes. J. F. Spade.
Water & Sewage Works 109, 110-113 (Mar. 1962).

Methods of treatment for laundry wastes are described as chemical precipitation, sand filters, and high rate trickling filters. Emphasis is made on the increasing use of diatomaceous earth filter. Results obtained in the removal of BOD (biological oxygen demand) and detergents (measured by ABS determination) from two commercial type plants are encouraging, but best results are limited to plants operating at a maximum of 40,000 gal./day.

-- Public Health Eng. Abate.