

Case involving hospitalization due to chlorine gas poisoning and chemical conjunctivitis after waste liquid was poured into a waste liquid tank containing water



[Location of accident]

Waste liquid tank used as part of perfume research procedure

[Cause of accident]

As part of a perfume research procedure, the victim poured waste phosphoryl chloride reagent into a waste liquid tank filled with water to prevent fires. The waste liquid reacted with the water in the tank, generating chlorine gas, to which the victim was exposed.

[Damage/injuries]

The victim was transported to the hospital by ambulance, diagnosed with chlorine gas poisoning and chemical conjunctivitis, and hospitalized.

Extract from [Preventive measures]

[4] A risk assessment must be performed following any changes in waste liquid tank procedures. Any change must include health and safety training. Accident prevention measures must be implemented to ensure workers are aware of hazards and toxicity.

Riken Keiki Recommendations

We recommend deploying gas monitoring systems and implementing measures to minimize the risks associated with working in environments in which gas may be generated, as highlighted in risk assessments.