

Safety and health alert

13/03 Employee slips into caustic degreasing tank

Incident

A recent accident in a zinc plating works has highlighted risks associated with process tanks in this industry. An employee encountered difficulty when attempting to remove a rack supporting components immersed in a pre-treatment degreasing tank. The employee decided to climb onto the rim of the tank to gain closer access to the problem area. It is believed he slipped and fell into the 5000 litre tank containing caustic soda. Due to the temperature and nature of the caustic solution, the process worker received serious chemical and thermal burns to the lower half of his body.

Factors

Risks can be reduced by:

Preventing employees from working over or leaning into process tanks

The design and construction of tanks and support structures should be such that foot and handholds are not available to employees. This will assist in reducing the ability for employees to climb on tanks or overreach from the tank sides. Adequate walkway access to process tanks should be provided to ensure employees have adequate means to remedy difficulties with items being treated.

Ensuring employees do not work alone

Adequate supervision must be provided to ensure employees work in a safe manner and use the control measures provided and should a difficulty arise appropriate persons are on hand to render assistance.

Eliminating the potential for falls from heights

Elevated walkways need to be constructed so that the risk of falls is eliminated.

Providing appropriate personal protective equipment

The style and fit of PPE should be such that it is suited to the range of tasks to be performed. Due to the nature of some of the materials used in the process, floors and other surfaces can be slippery.

Providing material safety data sheets (MSDS)

MSDS must be available at the workplace and contain the required information as set out by the National Code of Practice for the Preparation of Material Safety Data Sheets [NOHSC: 2011].

Showers

Safety showers should be located as close as practicable to the process area and on the same level to avoid the need to access stairways.



Recommendations

1. Ensure systems of work are implemented such that employees are not required to be in a position where they can fall or slip into process tanks.
2. Ensure that safety showers are easily and safely accessible in the event of an emergency.

Further Information

Further information can be obtained from the WorkSafe internet site www.worksafe.wa.gov.au, or by contacting customer service on 1300 307 877 or email: safety@docep.wa.gov.au.

Date: November 2003

A413339

