

Contractor killed by discharge of gas from pressurised bottle

Type of Incident:

Industrial

Operating Company:

SPDC Nigeria

Location of Incident:

Kidney Island Pipe Yard, Port Harcourt

Date & Time of Incident:

31-08-04 at approximately 09:30 Hrs

Incident Classification:

Actual: 4(P)

Incident Description:

Some Warehouse Service Service Contract Staff embarked on a routine clean up and re-arrangement exercise in Kidney Island Pipe yard, Port Harcourt in preparation for the Keep Shell Nigeria Clean Inspection. During this process, some cylinders with Chlorine under pressure fell-off the forklift (on a pallet) and rolled into a nearby gutter. In an attempt by the crew to manually pick-up these 157 kg heavy cylinders, one of the them slipped from their hands and hit another cylinder in the gutter. The resultant impact fractured the neck of the bottle leading to discharge of gas from it into the atmosphere. Some members of the crew inhaled the gas and were given medical attention at Kidney Island Clinic. The victims were later evacuated in an Ambulance to Shell Industrial area Hospital for further medical attention. One of the affected crewmembers died in the hospital at about 1430hrs the same day. Autopsy report confirmed the cause of death, as pulmonary Oedema.

Outcome:

1x Fatality

Immediate Causes:

- Use of wrong packaging tool for cylinders during the transfer with forklift (cylinders placed on pallet instead of cage with hook for lifting)
- Manual lifting of chlorine gas bottle weighing 157kg by two persons.
- Lack of job hazard identification and analysis
- Poor supervision

Lessons Learned:

- Use of correct tool for every operation to be strictly enforced
- Strict compliance to Procedures will prevent wrong assumptions and practices in the work place.
- Adequate training of staff on the identification and management of hazard will help staff to take necessary precautions.
- Proper inventorisation and storage of hazardous materials in the organization is required for proper management of such items.

Photograph:

Original position of cylinder in Gutter before incident



Position of Cylinder after incident



Fractured Cylinder neck