



Learning from Incidents - Flash Fire Incident

Incident Summary

Date	31 st March 2023
Time	1350 hrs
Weather	Clear
Location	Depot Entrance
Activity	Pothole repair
Incident Statement	4 contractors were in the process of preparing Asphalt by heating in a wheelbarrow. One of the team member fetched and poured flammable substance into the wheelbarrow that was still being heated using LPG blow torch. A flash fire occurred after pouring the substance
Immediate Action Taken	<ul style="list-style-type: none">• The ERP was activated, and the Emergency Response Team attended to the IPs.• The IPs were treated at the Clinic and later taken to a local hospital• Equipment involved in the incident has been secured
Impact	Burn injury resulting in Lost Time Injurie (LTI)
Incident Classification	3 Lost Time Injuries (LTIs), 1 Medical Treatment Case (MTC)

Sequence Of Events

Date	Time	Events
31 st March 2023	0730 hrs	Team (3 persons) arrived at Depot and filled up Permit To Work (PTW)
	0950 hrs	Permit Issued (Hot Work) by Terminal Operator and approved by Acting Terminal Manager
	1100-1130 hrs	Acting Terminal Maintenance Supervisor visited the Job Site** <i>No hard evidence to support</i>
	1300-1330 hrs	Injured Person (IP) 1 joined the team after lunch and assisted the team to move 2 spades, picks, gas bottle, torch and sanitizer. 4 Injured Persons standing around the wheelbarrow containing Asphalt. Torch was burning before the sanitizer bottle was picked up.
	13:50:07	Flash Fire occurs. Injured Persons seen running in both a Northerly (1 IP) and Southerly (3 IP) direction away from the wheelbarrow.
	13:50:24	Terminal Security responded to the fire
	1352 HRS	One of the IP returned to the job site to extinguish the fire using the fire extinguisher. Another IP returns in the direction of the security guard.
	1353 HRS	Fire was extinguished. IPs removed their burning overalls called the Facilities Coordinator
	1400 HRS	Emergency Response team notified
	1404 HRS	Ambulance arrived on site and administered first aid
	1420 HRS	All IP Transported to the clinic

Site Pictures



- Asphalt heated in the wheelbarrow using LPG torch. 4 contractors (IP) were around the wheelbarrow during the process.
- One of the contractor poured hand sanitizer while heating of Asphalt to help speed up the Asphalt softening process
- Flash fire occurred after the pouring of hand sanitizer
- One of the IP ran back to the incident site and extinguished the fire

Wheelbarrow



Findings

Findings #1 –Non -Compliance to Permit To Work (PTW)

- Inadequate hazard identification (Hot surface, Moving vehicle, pressurized substances LPG, hazard impose to pedestrian)
- Inadequate mitigation in place (Area was not barricaded and warning sign was not in place at the worksite and preparation area, no firewatcher)

Findings #2 –Risk Assessment was not sighted

- No JHA conducted for this job as it was perceived as routine and low risk job

Finding #3 – Pothole Patch Work Instruction (WI) was under draft

- The pothole repair procedure was not reviewed and approved due to the migration of documents

Findings

Finding #4 – Sanitizer usage in cold tar asphalt

- Based on the interview with IPs sanitizer was used in previous jobs

Finding #5 – No supervisor present at site

- The transition structure which came into effect post shutdown does not indicate the post (position) for supervisor. No supervisor appointed for the pothole patching job

Finding #6 – Maintenance Work Management for Internal Contractors

- There were no maintenance work process for corrective maintenance conducted by contractors

Finding #7 – Delay in Emergency Response Team

- Delay in arrival of Emergency response team due to confusion caused by inadequate organizational management of change