



IUEC INCIDENT SUMMARY

CLOSE CALLS, NEAR MISSES AND INJURIES

“CLOSE CALL”



Description of Incident

Control Type: NA

Machine Type: NA

Speed: FPM NA

Capacity: LBS 5000

Rise: 16 Stop

Hoistway Configuration: Single Freight Car

- A modernization team was working in the hoistway at the 15th floor adjusting interlocks and door hangers in a refinery when they were exposed to dangerous levels of Carbon Monoxide. The temperature was 95 degrees, the humidity was almost 100% and the winds were gusting over 12 MPH.
- The team was required to take numerous safety and training courses in order to work in the facility. The training included wearing a CO monitor and what to do should the alarm sound. Suddenly the team began to feel dizzy and nauseous; their monitors failed to detect dangerous levels of CO due to the wind gusts and they thought it was related to the heat.
- It was lunch time and they decided to take a break. As they descended on the car top at 25 FPM their CO monitors detected dangerous levels of gas. They were about to lose consciousness when they reached the ground floor and were able to breathe fresh air.
- Upon exiting the elevator, they discovered the area was cordoned off with red DANGER tape. The refinery experienced a leak that vented CO gas near the hoistway and they failed to notify the elevator constructors working on site. They also failed to make sure the area was clear.
- Both men were taken by ambulance to the emergency room where they were given oxygen and underwent numerous lab tests. Both men were released a few hours later and were still experiencing headaches.





Recommendations and Lessons Learned

Always follow the company safety policy.

Always perform a JHA/JSA

Possible Root Causes

- The root cause comes down to negligence, a failed Emergency Action Plan (EAP) and failure of the refinery staff to follow safety protocols.

29 CFR 1910 OSHA Subpart Z

- 1917.24(a) Exposure limits. The carbon monoxide content of the atmosphere in a room, building, vehicle, railcar, or any enclosed space shall be maintained at not more than 50 parts per million (ppm) (0.005%) as an eight-hour average level and employees shall be removed from the enclosed space if the carbon monoxide concentration exceeds a ceiling of 100 ppm (0.01%).
- 1917.24(b) Testing. Tests to determine carbon monoxide concentration shall be made when necessary to ensure that employee's exposure does not exceed the limits specified in paragraph (a) of this section.
- 1917.24(c) Instrumentation. Tests for carbon monoxide concentration shall be made by designated persons using gas detector tube units certified by NIOSH under 30 CFR part 11 or other measuring instruments whose accuracy is as great or greater.
- 1917.24(d) Records. A record of the date, time, location and results of carbon monoxide tests shall be available for at least (30) days.
- **The photo shows the monitor registering 104 ppm.**