Untrained Worker Coated By Caustic Liquor From An Erupting Digester



A laborer working in a pulp mill went into an old, unused control room for his lunch break. Warning lights were flashing indicating a potentially dangerous situation with a plugged pressure sensing device. The worker; however, had not been trained to be aware of what the flashing lights meant.

Just after he entered the control room, a large amount of extremely hot product, which was under high pressure, erupted from a digester in the adjoining room. It blasted through a weak area in a wall and landed right where the laborer was sitting. He was extensively and severely burned by steam, hot stock and black liquor.

In trying to escape from this torture he chose an exit route, which took him out onto the digester charging floor. Unfortunately, because this is where the vessel was erupting, the conditions here were even worse.

The first aid station had limited equipment and supplies and there were no qualified first aiders capable of addressing any injuries. There were also no emergency showers or eye wash stations nearby so he was hosed down with a pressurized fire hose. He died of his injuries in hospital the next day.

A similar incident had occurred six weeks before this fatal accident, but no action was taken to correct the problems. There was also no routine preventative maintenance program put into place, which likely would have prevented this death. The computer operating system had been gradually phased in over the previous five months, but neither foreman nor the operators were completely familiar with the system. The operating instructions for this computer consisted of two highly technical manuals and none of the operators understood them.

There had been disagreements as to whether certain tasks (safety checks) should be performed by digester operators or by instrument mechanics. There was also confusion as to which specific tasks were handled by the “cook” or his helpers during equipment operation.

This incident is a very sad example of why safety training and incident follow up is so extremely important.