

Gauley bridge and bhopal disasters



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The Gauley Bridge Disaster

The Hawks Nets Tunnel was being built near Gauley Bridge in West Virginia, and during that time, close to five hundred workers died from silicosis, and about one thousand five hundred contracted the disease (Lobo, 2012). The tunnel's construction began in the 1930's, and it required the contractors to blast and drill through two mountains near the Gauley Bridge. During the period of construction, in the 1930's, African Americans were still dominated by whites, and more than eighty percent of the workers were blacks (McCulloch & Tweedale, 2014). The workers were also not union members (Lobo, 2012), which might have made their labor cheap and exposing them to exploitation. The excavation took place during the time of the great depression when unemployment rates were high, and people, especially blacks, would do any work to earn a living. Most likely, racism played a key role in the neglect of the workers' safety and health when they were drilling through the mountains.

The African workers were supervised with armed white men (McCulloch & Tweedale, 2014). As a result of being exposed to silica, which originated from the excavation, hundreds of workers developed silicosis due to a buildup of silica particles in the lungs. Silicosis is a dreadful disease that permanently affects the lungs, making it lose its functionality gradually, which eventually leads to death (Lobo, 2012). The contractors responsible for the building of the tunnel never took any preventive measures to ensure that workers worked under safe conditions. However, the mountains contain high levels of silica, which is very toxic. The death of about five hundred employees and infection of one thousand five hundred more could have

been prevented if the contractors employed standard safety measures such as wearing respirators to avoid inhaling silica. Since the incident, regulations that require workers to use protective equipment are enforced by institutions such as National Institute for Occupational Safety, which is dedicated to how to prevent silicosis and how to identify symptoms (Lobo, 2012). Also, today some unions and laws ensure the rights and safety of workers are not compromised.

The Bhopal Disaster

In late 1984, a pesticide factory known as Union Carbide experienced a leakage of about forty metric tons of methyl isocyanate (MIC), a very deadly gas (Yang, Khan, & Amyotte, 2015). The incident occurred in Bhopal, India, and at least four thousand people were killed immediately after the gas had leaked. The actual figure is not precise because the government, activists, and independent bodies have different estimations. More than half a million residents were exposed to the deadly gas, and more than twenty-five thousand people have died up to date due to exposure to the toxic gas and pollution of the environment (Yang, Khan, & Amyotte, 2015). Also, thousands of animals died, their dead bodies littered the streets (Yang, Khan, & Amyotte, 2015). The main effects of the gas included choking, burning eyes, breathing difficulties, and frothing at the mouth. Other people died from being trampled on by other people as everyone was confused and running for their lives.

The massive leakage of MIC was caused by several violations of plant procedures, negligence of internal leaks, and flaws in design (Goh, Tan, &

Lai, 2015). According to personnel who were employed at the factory, the management never took health and safety seriously. The site has been reported to still contain high levels of MIC (Yang, Khan, & Amyotte, 2015). Soil and water bodies were also polluted, and up to date, children are born with defects such as brain damage and twisted limbs. Since the Bhopal disaster, the judiciary took an active role in protecting the environment (Goh, Tan, & Lai, 2015). Laws such as the Factories Act were passed to ensure that industries followed international and national standards, as well as understanding the risk involves and how they can be mitigated or prevented.

Two Other Similar Stories: Russia's Chernobyl and China's Jilin

The explosion at a nuclear power plant in Chernobyl, Russia in 1986 released radioactive material that was more than four hundred times stronger than that released in Hiroshima (Cardis et al., 2006). The effects of the extreme radiation are still present as children are born with defects, develop cancer, and several other health issues. Studies suggest that the radioactive material needs at least two hundred years to wear off, making the environment safe for people (Cardis et al., 2006). In November 2005, the Jilin chemical plant in china exploded and resulted to the death of six workers and dozens were injured (Fu, W., Fu, H., Skøtt, & Yang, 2008). The explosions polluted the river, which has led to reduced white cells amongst the residents, leading to leukemia. Additionally, it is estimated that over one hundred thousand people are likely to develop cancer (Fu, W., Fu, H., Skøtt, & Yang, 2008). For both incidents, safety standards were improved to ensure that such an incident does not repeat itself.

References

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