Disaster safety management



Bhopal disaster, 1984 was the worst's industrial disaster, occurred in Madhya Pradesh. Methyl iso cyanate and many other toxic gases leaked from thepesticide plant in the night of December 2-3. Due to this incident, thousands of people died leaving many people injured. The pesticide plant was Union Carbide Pesticide India Limited. The immediate death toll was 2, 259 and the death toll related to the gas release was 3, 787. 1979 was when a MIC was introduced in the production plant. The water entered the tank containing 42 tons of MIC. This resulted in increased pressure and temperature over 200° centigrade. Due to the blowing North-Westly winds, the vented gases were introduced to Bhopal. Regarding the safety issues, in November 1984 most of the safety problems persisted in the industry. The safety system was not good at that time as many pipes and valves were not in good conditions. The 42 tons of MIC was above the safety lines allowed. Due to these lacking and increased temperature and pressure, presence of contaminants, resulted in the emergency venting from MIC tank that caused release of toxic gases. Due to lack of safety instructions to the workers that cleaned pipes from water, without having slip-blind water isolation tap, the water entered the tank 610 and caused the problem. But these safety issues were denied by the corporation. The health effects at the start was the burning eyes, suffocation and vomiting. The Hamidia hospital reported the patients had symptoms of respiratory difficulties, blindness and visual impairments. Due to the toxic gases that were denser than air, these gases stayed near the ground. The people that ran rather than using vehicle were more exposed to these primary symptoms of suffocation, coughing, vomiting and eye irritation. Similarly the height differences caused more effects on short heighted persons. Not only thousands of people died due to severe

exposure but along with humans, 2000 livestock including buffaloes, goats were collected and buried. 520000 were affected. The acute symptoms included the breathlessness, stomach pain, blepharospasm, pulmonary oedema. The estimated 100000 to 200000 people had permanent injuries including thin 1985e respiratory difficulties, immune disorders, and female reproductive difficulties. The legal aspects included the legal proceedings involving all the parties such as disaster victims, local authorities, United States and Indian Government and Union carbide. The Indian government in 1985 passed the Bhopal Gas leak Act that leads to the legal outburst of the case. The Indian government claimed US \$ 350 million from UCC. Eventually in 1989, out of court settlement were agreed when UCC agreed to pay US \$ 470 million against the damages. At the end of October 2003, \$ 2200 was given to the family that bears the death losses. The compensation awarder was to 554895 people. In June 2010, seven employees of UCC, all Indian national and certain other people were convicted for causing the deaths of the people due to negligence, sentenced two years of imprisonment and a fine of US \$ 2124 but were released on bail shortly afterwards. It was reported in August 2010 by the United States Department that Bhopal case was closed legally. The management was held liable for the Bhopal incident. Some of the reasons that denote the mismanagement from project management point of view were that there was no inspection of the amount of MIC filled in the tan which was above the recommended level. There was poor maintenance regarding the management point of view after the plant ceased MIC production. There was a failure of safety systems and the pipes and vents were not working properly. The safety systems were being switched off due to save money. There was a lacking of management and

disaster systems and non existing catastrophe plans. The plant location was also on densely populated area which was also a very dangerous regarding the impact. There was lack of skilled operators, safety management which was not taken seriously during the management of the project. Taken into account, the Bhopal disaster was a big tragedy. It must be kept in consideration to meet the environmental and safety demands of the project. The lacking of proper management and safety could lead to a serious consequences costing thousands of lives and pertaining risks for the generations to come. Health and safety issues must meet the demands and the disaster management is an important criterion for any industry to take into consideration. There must be evacuation plan for the people caught in disaster. Lack of all these stated issues led to serious consequences as were faced by the people of Madhya Pradesh. REFERENCES: Top of Form Union Carbide Corporation. (2011). Bhopal Information Center. Retrieved from http://www. bhopal. com/ Bottom of Form