

## **BHOPAL GAS TRAGEDY :**

It occurred on 3rd December, 1984 due to release of **methyl isocyanate** from Union Carbide Plant. The gas leak killed 4000 local residents instantly. The cause of that incident was water ending up in methyl isocyanate storage tank, causing an exothermic reaction, that released a huge amount of poisonous gas large enough to open the safety valve. Normally the scrubber would intercept the escaping gas but these were out of order for repair at the time.

## **CHERNOBYL INCIDENT:**

The chernobyl nuclear gas explosion took place on 26th April, 1986. The nuclear plant is situated in the capital of Ukraine, Kieve. Error in the reactor design and error in the judgment of the capacity of power plant causing cooling water to start boiling. This resulted in Energy Production increase to 10 times the normal level causing fuel rod melting. Extreme pressure in the cooling water pipes resulted in cracks. This caused the stream to escape explosion

and fire occurred in the plant and the radioactive material leaked out. After two days, it was reported that 10,000 times the normal amount of caesium<sup>137</sup> existed in the atmosphere. It is reported that more than 6,000 people were detected with thyroid cancer.

### **FUKISHIMA NUCLEAR DISASTER:**

On March 11,2011 an earthquake of 9 magnitude was recorded in Honsuh island of Japan. 2000 people were killed. The resultant Tsunami from the earthquake completely washed out the city of Sendau and damaged the nuclear power plant. The 6 meter high Tsunami waves entered the nuclear plant which overheated the reactor. It was reported that there was partial melt down in the reactor and hydrogen explosion was also reported.

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