



Fire at Union Carbide Factory

Why in News?

Recently, a **massive fire** broke out at the **Union Carbide factory in Bhopal**. The factory is where [methyl isocyanate](#) gas leaked in 1984, killing thousands of people and disabling millions.

Key Points

- The fire was brought under control after about an hour. Its cause is yet to be ascertained.
- The locals expressed their fear about the potential effects of toxic smoke on their bodies.
- The factory was shut down after the [1984 gas tragedy](#).

Bhopal gas tragedy

▪ About:

- The **Bhopal gas tragedy** was one of the **worst industrial accidents in history that occurred on the night of 2-3 December 1984** at the **Union Carbide India Limited (UCIL) pesticide plant in Bhopal, MP**.
- It exposed people and animals to the highly toxic gas **methyl isocyanate (MIC)**, causing immediate and long-term health effects and deaths.

▪ Causes of Gas Leak:

- The exact cause of the gas leak is still disputed between corporate negligence or employee sabotage. However, some of the factors that contributed to the disaster are:
 - The **UCIL plant was storing large quantities of MIC, a highly reactive and volatile chemical**, in poorly maintained tanks.
 - The plant was operating with **reduced staff and safety standards** due to financial losses and market competition.
 - The **plant was located in a densely populated area with no proper emergency plans** or warning systems for the nearby residents.
 - On the night of the disaster, **a large amount of water entered one of the MIC storage tanks (E610)**, either due to a faulty valve or a deliberate act of sabotage by a disgruntled worker.
 - This triggered an [exothermic reaction](#) that **increased the temperature and pressure inside the tank**, causing it to rupture and release a large cloud of MIC gas into the atmosphere.