

Visakhapatnam Gas Leak



Dr. Rekha P. Shenoy

Professor and Head
Public Health Dentistry
Yenepoya Dental College
merekhap@yahoo.co.in

In the early hours of May 7, 2020, at around 2.30 am, Styrene gas leaked out from the LG Polymers India plant located in RR Venkatapuram village on the outskirts of Visakhapatnam. The resulting vapour cloud spread over a radius of about three km, affecting nearby villages. When the alarm was sounded by alert villagers, the District Administration and the police swung into action immediately in the surrounding areas barging into houses, waking sleeping occupants and evacuating them to safer places. Panic gripped the areas as people ran for safety.

Established in 1961 as Hindustan Polymers, the plant was merged with McDowell & Co in 1978. It was acquired by South Korea-based LG Chem in 1997 and renamed as LG Polymers India. The plant, closed since March 2020 due to the COVID-19 lockdown, had 2,000 metric tons of styrene left unattended in storage tanks. When it reopened on May 7, it is believed that improper storage and operation errors allowed temperatures in the tanks to exceed safe levels causing styrene to vaporize. Styrene, chemically known as ethyl benzene, is a synthetic colourless liquid that evaporates easily. It is commonly used in the manufacture of plastic products using in food packaging, rubber, plastic, insulation, fiberglass, pipes and automobile parts. Acute

exposure results in irritation of mucous membranes and gastrointestinal effects in humans. Chronic exposure has effects on the central nervous system, such as headache, fatigue, weakness, depression, hearing loss and peripheral neuropathy.

People living in five villages surrounding the plant were the most affected, with hundreds of people rushed to hospitals with breathing difficulties, vomiting and burning sensation in the eyes. Many were found lying unconscious due to the effects of the gas. Today, the death toll stands at thirteen and more than 1,000 people are suffering the after-effects of the exposure.

Reports indicate that the company did not have a legitimate environmental clearance, which is issued by the Union Ministry of Environment, Forest and Climate Change (MoEFCC), and was, instead, operating with state permits. State permits only consider pollution and not safety aspects, whereas federal clearance assesses risks associated with the handling and storage of hazardous materials, prevention of any disaster and mitigation if disaster happens.

The Andhra Pradesh government has announced compensation for the kin of the deceased as well as for those affected. The Central Government flew in a specialized CBRN (Chemical, Biological, Radiological and Nuclear) team of



the National Disaster Response Force (NDRF) from Pune to the site. Two experts of the National Disaster Management Authority (NDMA), Dr. Anjan Ray and Mr. Shantanu Geete, inspected the plant and recommended neutralization of the gas and removal of chemicals from the facility. On 8th May, the National Green Tribunal (NGT) ordered LG Polymers India to deposit Rs. 50 crore with the District Magistrate of Visakhapatnam to mitigate damages caused by the accident, and issued notices to the MoEFCC, the Andhra Pradesh Pollution Control Board (APPCB) and the Central Pollution Control Board (CPCB).

This incident brought back chilling memories of Bhopal gas tragedy (December 3, 1984) when poisonous methyl isocyanate (MIC) leaked out at the Union Carbide plant, killing thousands and burdening survivors with severe health problems

to the present. While the after-effects of the Visakhapatnam incident are still to be uncovered, these haunting images will remain etched in our memories for a long time, a reminder of the perils of unchecked industrialization.

References

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