Vizag Gas Leak

Why in news?

A gas leak from the electronics giant LG's styrene plant has claimed lives in Vizag, Andhra Pradesh.

What is styrene?

- Styrene is a flammable liquid.
- It is used in the manufacturing of polystyrene plastics, fibreglass, rubber, and latex.
- It is also found in vehicle exhaust, cigarette smoke, and in natural foods like fruits and vegetables.

What happens when exposed to styrene?

- **Short-term exposure** to the substance can result in respiratory problems, and irritation in the eyes and mucous membrane.
- It will also cause gastrointestinal issues.
- **Long-term exposure** could drastically affect the central nervous system and lead to related problems like peripheral neuropathy.
- It could also lead to cancer and depression in some cases.

What are the symptoms?

- Symptoms include headache, hearing loss, fatigue, weakness, difficulty in concentrating etc.
- Animal studies have reported effects on the CNS, liver, kidney, and eye and nasal irritation from inhalation exposure to styrene.

How bad is the situation in Vizag?

- It is unclear whether the deaths are due to direct exposure to styrene gas or one of its by-products.
- Vizag Police has maintained that the gas is "non-poisonous" and is only fatal when exposed for longer durations.
- However, hundreds of people were admitted to hospitals.
- The cases are high as the gas leak was detected early in the morning.
- Several crucial hours have been lost till safety precautions were taken, and

the gas was allowed to spread while people were fast asleep.
- Officials immediately began making announcements over speakers.
- But many have already become unconscious as police had to break open doors to shift people.

What caused the leak?

- LG Polymers said that stagnation and changes in temperature inside the storage tank could have resulted in auto polymerization.
- This in turn resulted in vapourisation.
- There was 1,800 tonnes of styrene stored at the plant during the leak.

Is the leak under control?

- The leak has been plugged.
- NDRF teams moved into the five affected villages and have started opening the houses to find out if anyone was stranded inside.
- Officials said that the Covid-19 preparedness helped a lot as dozens of ambulances with oxygen cylinders and ventilators were readily available.
- The spread of the gas depends on wind speeds.
- So far it is estimated that areas within a five kilometre radius have been affected.

Source: The Indian Express

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