## **ABSTRACT**

Currently, air pollution is a big problem for people health in cities that suffered from the more factors such as the traffic, industrial, or forest fire or polluted skies. This system is not only cost-effective but also provides real-time monitoring and immediate alerts, reducing the risk of accidents and ensuring the safety of workers and surrounding communities. provides real-time monitoring and immediate alerts, reducing the risk of accidents and ensuring the safety of workers and surrounding communities. Leakage of gases can lead to loss of valuable resources, increased production costs, and environmental damage. Leakage can occur in various forms including air, water, gas, or chemical leaks from pipelines, valve fittings, or tanks.

In addition to the economic and environmental impact, leakage can also pose a safety risk to employees working in the affected area. The release of hazardous materials, such as toxic chemicals, can result in serious health consequences if not addressed promptly. To prevent leakage, industries need to implement proactive measures such as regular maintenance checks, upgrading equipment, and implementing leak detection systems. By addressing leakage issues, industries can reduce costs, improve efficiency, and demonstrate a commitment to environmental responsibility and workplace safety.