

Incident investigation

Over the last 40 years, Gexcon has been involved in the investigation of many high-profile accidents such as Buncefield, Piper Alpha, TWA 800, and the P-36 platform (Brazil). With our experience, we can assist with large loss investigations ranging from residential fires to chemical processing, petrochemical, manufacturing, and other industry facilities.

Our expertise includes site inspections using advanced techniques to map the environment, locate gas and vapour pathways, detect chemical residue, and collect and preserve physical evidence.

Key services

Accident scene investigation

- Documentation of damage and debris
- 3D laser scanning and model reconstruction
- Ground penetrating radar (GPR) for detecting potential migration pathways
- Sampling/ chemical analysis and evidence collection
- Interacting with government agencies and other involved parties

Explosion and blast modelling

- Reconciliation of near and far-field blast damage
- Examination of release and/or leak scenarios, vapour dispersion
- Identification of blast origin and evaluate ignition sources

Toxic chemical releases

- Evaluation releases from tank or pipeline failures, spills, fires, explosions, or industrial operations
- Characterisation of high and low-pressure gas releases, flashing liquid or pool spills, and cryogenic liquid spills
- Examination of toxic gas dispersion, chemical exposure, stack emissions, and atmospheric conditions

Litigation support

- Development of high-quality exhibits and animations
- On-site expert services

