

Major Hazards & Emergency Planning



Unit Code: Part of CPE 6001

A major hazard release or emergency can be catastrophic. This four-day course offers practical risk assessment that will enable you to minimise the chance of this happening or limit the effect of the release. It also gives practical advice about emergency procedures and drills.

This module considers practical risk assessment, the effects of the release of process material and the failure to dispose of emissions and effluents safely.

Methods for the evaluation of the quantity of release and its reduction are covered. The modelling of atmospheric dispersion is described.

Course Content

- **Past incidents** — Flixborough, Bhopal, Piper Alpha and Milford Haven
- **COMAH and Seveso II** — a practical overview of COMAH regulations
- **Consequence analysis** — understand the consequences of a release of noxious gas into the environment
- **Major accident hazards to the environment** — examples and methods to assess risk
- **Source terms** — gas dispersion, vapour cloud explosion and other consequence models
- **Predictive models and typical incidents** — vapour cloud explosions, flash fires, pool fires and BLEVE fireballs
- **Toxicity, thermal radiation and overpressure**
- **Aspects of off-shore emergency planning** — off-shore hazards, competency & environmental factors, co-operation amongst rescue services and PFEER (Prevention of Fire & Explosion & Emergency Response) regulations
- **Aspects of emergency planning for major chemical hazards**
- **Preparing on-site and off-site emergency plans**
- **Emergency exercises and drills**
- **Emergency plans for the chemical industry** — the local authority role
- **Risk assessment** — individual and societal risk, risk evaluation and risk criteria
- **Transportation of dangerous goods**

