



# Industrial Chemical Fire Escalation Guide

[www.firerescue.com.au](http://www.firerescue.com.au) | Fire & Rescue Blog

## Key Takeaways:

- Chemical fires escalate rapidly and unpredictably
- Coordination between Fire, Ambulance, Police, & SES is crucial
- Preparedness and safety protocols are essential



## Background & Context:

- Hazardous materials increase fire risks
- Regulations and specialized training are vital
- Environmental factors affect fire behaviour




## Escalation Patterns:


- Initial Ignition & Spread:**
  - Vapour clouds ignite explosively
  - Fires spread quickly in open areas
- Thermal & Chemical Reactions:**
  - Heat triggers violent reactions
  - Reactive chemicals complicate suppression
- Secondary Explosions & Toxic Smoke:**
  - Risk of secondary blasts
  - Release of hazardous fumes




## Emergency Response Roles:

 FIRE & RESCUE


- Contain & Suppress

 AMBULANCE

- Medical Assistance

 POLICE

- Scene Control

 SES

- Evacuation Support

**Know the Risks. Be Prepared. DIAL 000 for Emergencies**