



# Emergency Response Strategies

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- Importance of a Solid Incident Management Strategy
- Anatomy of an Incident
- Key Essentials of an Emergency Response Plan



# IMPORTANCE OF A SOLID INCIDENT MANAGEMENT STRATEGY



## 1. Mitigating Exposure and Reducing Risk

- Protect Life/Safety of Employees & Responders
- Preserve Environment
- Protect Property & Assets (BCP)
- Protect Corporate Brand

## 2. Properly Preparing for a Hazardous Materials Incident

- Emergency Responder Preparedness (Fire, Police)
- Medical Treatment Facilities (Hospitals)
- Communicating to the Community

## 3. Contingency Planning & Emergency Planning Procedures

- Not Required for CESGQ (40CFR§261.5)
- Basic Plan for SGQ (40CFR§262.34(d)(5))
- Full Plan for LQG (40CFR§262.34(a)(4))

## Cause

- Chemical Plant in Dalton, GA – August 2004
- Runaway chemical reaction during the production of new product produced a highly toxic and flammable cloud of allyl alcohol and allyl chloride into the surrounding community
- Facility did not adequately assess the hazards with the new process and did not inform the local responders of the new hazard
- Local emergency responders were inadequately prepared to respond to the release

## Effect

- Required Over 200 families evacuated for over a 9 hr period
- 154 people treated for respiratory distress and skin and eye irritation
- 5 residents hospitalized overnight
- 1 employee treated with chemical burns
- Investigation Report Issued by the US Chemical Safety & Hazard Investigation Board <http://www.chemsafety.gov>

## Findings

- Facility did not understand or anticipate reactive chemistry hazards nor did they perform hazard assessment of chemicals/processes involved
- Facility did not prepare an adequate emergency response plan
- City & County response team did not have proper PPE or air monitoring devices to safely respond to the release
- County ER Plan did not include effective communication or evacuation plan
- SERC did not provide sufficient oversight or assist the local emergency response agencies in planning for hazardous chemical incidents



# ESSENTIALS OF AN ER PLAN



1. Facility Overview & Scope of Plan
  - Overview of facility operations
  - Description of the physical area
  - Nature of hazards or events to which the plan is applicable
2. General Facility Identification Information
  - Facility address
  - Owner/operator
  - Emergency and environmental contacts
3. Hazard and Impact Analysis
  - Identify the types of incidents that result in hazards to human health or the environment.
  - Identify types and quantities of materials involved
  - Assessing both direct and indirect effects of the release, fire, or explosion.
  - Evaluation of the surrounding impacted areas

4. Emergency Coordinators and Command Structure
  - Clearly define responsibilities
  - Include traditional incident command and control roles
  - Also consider additional roles such as public relations, agency liaisons, and finance to mitigate corporate exposure
5. Agency Emergency Contacts and Arrangements
  - Identify who local emergency responders, and know when to engage them and what their response capabilities are.
  - Specify any designated emergency response contractors
6. Employee Training and Response Capability
  - Knowing what the level of training is appropriate for your employees and what response capabilities they should take on
  - Properly identifying releases of hazardous materials and assessing and utilizing hazard information is critical
  - Proactively manage critical hazcom program fundamentals

## 7. Emergency Procedures

- Clearly describe procedures to be carried out by facility personnel to implement a response management system
- Include procedures to be followed by employees who remain to operate critical plant operations before they evacuate.

## 8. Notification Procedures (Internal & External)

- Knowing when agency notifications (NRC, State & Local) are required and what information must be reported
- Engage Local Emergency Planning Committees, CAER groups or community advisory panel to ensure the public is up to speed on warning systems, evacuation procedures and sheltering in place in the event of a chemical release.

## 9. Sustained Actions and Termination Procedures

- Establish processes for managing transition from the initial emergency response to the sustained action
- Document all communications and actions related to an incident
- Document lessons learned during an incident

## 10. Plan Review and Revision

- Change management is often a critical element of managing risk that is often overlooked
- Evaluated changes in business operations, regulatory requirements, chemicals and/or hazards, or employees.



# Questions

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