

# When Lightning Strikes Your Plant Floor

John Amann, Vice President of First Aid & Safety, Cintas Corp.

Although leaders within your business would like to believe disasters won't occur, failing to prepare for one puts your workers and bottom line at risk. Several disaster-related hazards can impact your business including, fires, natural disasters, chemical spills, medical emergencies, blackouts and more. Preparing a disaster plan that details how to maintain safety and productivity, and reviewing it with employees can help your business be proactive and ensure the correct reactive solutions are onsite to limit the impact of workplace emergencies.

### Step One: Building a Team

Your organization should draft a disaster plan as soon as possible so that an emergency doesn't catch management and workers off guard. The ideal disaster plan will contain extensive resources, so it's likely that a team of individuals will need to collaborate during its development. Recruit safety directors, upper management and seasoned employees for the team and bring in third-party safety experts to help consult and guide the process.

### Step Two: Identifying Threats

Conducting a risk analysis is a proactive approach to identifying possible threats or worst-case scenarios your organization may encounter. These threats can impact one area of your building, the entire facility or even a large geographic area. Outline the following types of risks:

- Historical: What kinds of emergencies have occurred nearby or in your facility in the past (i.e., tornado, chemical spill, electrical fire)?
- Geographic: How does your specific location affect safety (i.e., near earthquake fault lines or power plants)?
- Human Error: How might employees negatively affect safety (i.e., fatigue, failure to wear personal protective equipment (PPE) or using medications that are brought from home)?
- Physical: How does the construction and design of your facility impact safety (i.e., aisle width, shelter areas, lighting)?

### Step Three: Mitigating the Impact

As a next step, it's important to ensure your disaster plan defines strategies to deal with potential emergencies. This will allow your business to reduce the negative impact an emergency has on workplace safety and productivity. Consider detailing the following:

#### 1. Site map

## **When Lightning Strikes Your Plant Floor**

Published on Chem.Info (<http://www.chem.info>)

---

Create a site map for each property that shows the location of critical controls and equipment. This includes water hydrants, water, gas and sewer lines, alarms, fire extinguishers, sprinkler systems and floor plans showing exits, stairways, escape routes and restricted areas. When appropriate, ensure that site maps are in multiple languages and/or use easy to understand symbols.

### *2. Emergency contacts*

Plans should always list emergency contacts so that employees know to reach help quickly. Provide information for local police and fire departments, gas, power and other utility companies, poison and chemical spill control, electricians, plumbers and building managers. Post these numbers throughout the workplace and teach employees how to dial out from a landline.

### *3. Evacuation routes and shelter areas*

Specify primary and alternate emergency evacuation routes for fires and floods as well as a designated meeting place. Also highlight shelter areas for tornados, earthquakes and other extreme weather events. Then, develop protocols for semi-annual drills and attendance taking once employees have safely evacuated or found the shelter area.

### *4. Emergency-response equipment*

Providing reactive solutions can alleviate the impact of a variety of emergencies. List details for emergency-response equipment such as: spill kits with gloves, safety goggles, bags and cleaning solution to safely and easily wipe up toxic materials; eyewash stations to flush out eye irritants and relieve pain following an accident; automated external defibrillators (AEDs) to revive individuals experiencing sudden cardiac arrest (SCA); fire extinguishers to aid in fire suppression; and first-aid cabinets and trauma kits to address injuries such as burns, cuts and diabetic reactions.

For minor abrasions and injuries, make sure all victims are safely in the emergency evacuation zone before first aid is administered. Determine the ideal number and placement of these items as well as ensure that maintenance programs are in place to ensure equipment is in working order and first-aid cabinets are well-stocked and compliant. Placing these items in evacuation routes helps to make for a more efficient and safer exit.

### *5. Safety training*

Your employees will need to understand their role before, during and after an emergency. Emergency Preparedness training is a proactive solution that helps ensure workers know what to do. Include training logistics in your disaster plan, such as when and how often training will occur and what topics sessions will cover. Make sure training is performed as required by OSHA and includes topics such as CPR/ AED and first aid and fire extinguisher training and covers all pertinent

## When Lightning Strikes Your Plant Floor

Published on Chem.Info (<http://www.chem.info>)

---

information included in the disaster plan.

### 6. Updated Safety Data Sheets

A Safety Data Sheet (SDS) details how to safely handle chemical storage, disposal and clean-up and first aid in the event of a spill. It also provides instructions for the required PPE and highlights important chemical information like toxicity and health effects. Ensure that SDSs are available for all chemicals onsite and easily accessible to first responders. Conduct training sessions so that employees understand how to read them and can easily maintain safety while working with chemicals.

### Step Four: It's Written; Now What?

Once the disaster plan is complete, your safety directors should provide all employees with their own copy and thoroughly review it during periodic safety training sessions. This allows workers to raise concerns and better understand the appropriate steps to take in the event of an emergency. You can supplement classroom learning with DVD and online training to provide employees with self-paced lessons and quizzes. Place key portions of the document throughout the workplace, such as evacuation routes near entryways and chemical spill instructions inside spill kits.

It's important to keep disaster plans current. Update plans when purchasing new equipment, changing building layouts or when safety regulations are altered. If an emergency occurs, analyze the effectiveness of the disaster plan following the event. Determine areas that need improvement and details that need to be added. As always, call attention to any updates by reviewing them with employees during safety training sessions.

### Ready for Anything

Creating a disaster plan should be a top priority for every business. These plans allow organizations to proactively prepare for emergencies and outline the equipment employees can use to respond when help is needed. Although there is no one-size-fits-all template for a disaster plan, your business can follow a few guidelines in order to create and implement a plan with ease. It is important to include emergency response strategies for industry-specific hazards as well as other potential incidents. With a detailed plan and informed employees, your organization can better respond to a disaster of any type.

For more information, please visit [www.cintas.com/firstaidsafety](http://www.cintas.com/firstaidsafety) [1].

**Source URL (retrieved on 02/26/2015 - 11:23pm):**

<http://www.chem.info/articles/2013/01/when-lightning-strikes-your-plant-floor>

## **When Lightning Strikes Your Plant Floor**

Published on Chem.Info (<http://www.chem.info>)

---

### **Links:**

[1] <http://www.cintas.com/firstaidsafety>