

WHITE PAPERS

## FOOD PLANT EMERGENCY RESPONSE



Natural disasters can wreak havoc on a food processing facility, not only causing physical damage to the building, but also resulting in a huge economic loss in product and production downtime. In this white paper, we look at proactive steps food plants can take to prepare for a natural disaster and the two types of OSHA-mandated emergency response plans. We also provide steps your plant should take in preparing a plan, and discuss federal regulations targeting food plants with hazardous materials.

## THE THREE PS OF PREPARING FOR NATURAL DISASTERS: PLAN, PARTNER AND PRIORITIZE

Planning for a natural disaster has to be strategic and should include partners from your local emergency response teams, vendors and designated employees.

### YOUR DISASTER RESPONSE PLAN SHOULD BEGIN WITH THESE THREE ACTIVITIES

**1. Plan** — A generic emergency response plan is not sufficient. Your plan must be specific to your location and your product. Begin by looking at what natural disasters are likely to occur in your region of the country, whether it's a tornado, hurricane, fire or flood. Then, look at the possible implications of that disaster on your physical building, but also on your product and supply chain. Chart out what areas of your plant are impacted by a power outage, what processes may shut down due to the loss of rooftop equipment, and what key areas should be protected from water damage.

The purpose of an emergency response plan is to protect your assets, including especially your employees. It's important to appoint a response team who understands all of your plant's systems and how those systems can be safely shut down in the event of a disaster. In case of a fire, how do you secure your ammonia or refrigeration systems to prevent a release and who is responsible for safely engaging the system shutdown? shut-off valve? What's your plan to evacuate the building immediately and efficiently, and how will you account for all employees? Industry groups and government regulatory agencies are a great resource and provide requirements and recommendations your plant can follow in developing a plan.

**2. Partner** — Based on the types of natural disasters that may occur in your region, identify local partners who can quickly respond to your specific needs. If you lose power, don't solely rely on the local power company to restore it quickly. They must serve the needs of the entire community. Have your own plan in place with partners and your local utility. Reach out to local partners and vendors to be part of your response team. Know where you can obtain industrial generators and how they will be transported to your facility. Identify equipment suppliers who can quickly replace lost rooftop equipment necessary for production and have construction partners who can readily obtain materials and repair any building damage. Choose partners who have the knowledge base, expertise, and network of suppliers who can respond quickly with necessary parts and equipment.

**3. Prioritize** — Following a natural disaster, you'll need to prioritize which areas of your facility need attention first. Do freezers need to be restored first to avoid loss of product? Poultry plants may rely on automatic feeding systems that need to be restored to protect the supply chain. Don't discount the need to get utilities restored quickly to heat water for sanitation.

One important step that many plants neglect is to keep copies of your emergency plan and contact information for all partners off-site. Chances are, you won't be able to return to the building to access this information, so ensure you have response information stored off-site and in cell phones.

## WHICH EMERGENCY RESPONSE PLAN IS RIGHT FOR YOUR PLANT?

Food processing plants can do everything within their power to prevent an ammonia leak, from conducting proper maintenance and inspections to having the appropriate safety systems in place such as alarms, shut-offs, and overrides. Yet accidental leaks and spills can occur, so it's important to be prepared with an emergency response plan.

Emergency response plans are not only required by regulatory agencies, but serve to protect the plant and its employees. Yet the plan is only effective if every employee is included in the plan, understands his/her role and is able to properly implement the plan when needed. For example, each department should have a preferred means of reporting – who is authorized to pull the alarm, who can shut down the production lines, who will pull the ammonia shut-off switch? These lines of authority are crucial to implementing the plan in an emergency.

## BASED ON OSHA REQUIREMENTS, THERE ARE TWO DIFFERENT TYPES OF PLANS A PLANT CAN HAVE

1. Emergency Action Plan – This is the most basic emergency response plan as required by OSHA, and the one that most plants choose. An emergency action plan simply states that the plant will rely on outside agencies following a release. Employees will evacuate the facility and wait for a HAZMAT team to arrive.

According to OSHA standards, the plan must include:

- A means of reporting the emergency
- Designated evacuation routes
- Procedures in place for employees who remain behind to operate critical plant operations
- Assigned rescue and medical duties
- Overall lines of authority

2. Emergency Response Plan – This is a more advanced plan that asserts that designated plant personnel will serve as first responders. Those first responders will be required to undergo extensive HAZMAT training and invest in mandatory HAZMAT equipment. Many plants shy away from this approach, as they must ensure that the appropriate number of HAZMAT-trained personnel are available on each shift. Plants that are located in remote areas where response time from emergency crews may take too long often choose this approach.

## FEDERAL REGULATORS TARGET HAZARDOUS CHEMICAL SAFETY

On August 1, 2013, President Obama signed an Executive Order on Improving Chemical Facility Safety and Security designed to reduce the risks of hazardous chemicals. While many food processing plants already have controls and processes in place to ensure chemical safety, tightened regulations and increased risks have encouraged many plant owners to take a second look at their programs.

## NATIONAL EMPHASIS PROGRAM AND PROCESS SAFETY MANAGEMENT

There is no shortage of regulatory requirements on how plants should store, handle and document hazardous chemicals. OSHA's National Emphasis Program (NEP), enacted in 2011, initially targeted refineries, but the agency is now taking a harder look at ammonia facilities due to recent incidents. Under NEP, OSHA has stepped up its programmed and unprogrammed inspections of food manufacturing facilities to ensure that Process Safety Management (PSM) is in place throughout all plant areas.

## VOLUNTARY PROTECTION PROGRAM

PSM is still at the forefront of plant safety with an all-encompassing program on requirements for the management of highly hazardous chemicals. Through its Voluntary Protection Program (VPP), OSHA provides plants an opportunity to take their chemical safety to the next level of PSM. Plants voluntarily open themselves up to OSHA for full, more detailed evaluations. VPP-certified plants are exempt from OSHA programmed inspections while they maintain their VPP status. OSHA inspectors are highly trained and will want to see records, analyze data, conduct interviews, and look closely at all systems.

## CHEMICAL FACILITY ANTI-TERRORISM STANDARD

Homeland Security's Chemical Facility Anti-Terrorism Standard (CFAS), enacted in 2007, had many plant owners taking a second look at securing their facilities, particularly where hazardous chemicals are stored. Again, plants with stringent PSM standards should be in compliance with CFAS.

## FIVE STEPS TO DEVELOPING THE MOST EFFECTIVE FOOD PROCESSING EMERGENCY RESPONSE PLAN

You've conducted the required emergency response training with your employees — but are they truly prepared for an incident? Recognizing that government-mandated training is often not enough, many food processing safety managers are going above and beyond mandated requirements and customizing training to ensure employees are prepared for a range of unexpected scenarios. Below are five key steps you can take to ensure your employees are prepared for any emergency:

**1. Identify leaders** among your employees who have the authority and skills to direct others during an emergency. Emergency leaders should be high-performing employees who are confident and adequately cross-trained among divisions.

**2. Use interactive training** methods to ensure your employees truly absorb the information. Employees can benefit from a variety of teaching methods including instructor-led training, online self-paced training, and attending safety classes at a local university.

3. Incorporate unexpected situations into drills to prevent employees from simply going through the motions and to see how they will react. Host debriefings afterward to discuss what worked, how the response could be more effective, and to solicit ideas and input from your team.

4. Access to safety equipment is critical to emergency response. Again, plan for the unexpected. Can employees easily locate and access emergency equipment in the dark? Is it accessible along evacuation routes? Does your supply include face shields, respirators, safety glasses, hard hats, earplugs, and personal protective equipment for each employee? Do you audit your supply to ensure the personal protective equipment will be available when it is required?

5. Engage partners as part of your plant's training program, as they'll most likely be onsite immediately following an emergency. Invite first responders from your Local Emergency Planning Committee (LEPC) as well as vendors and service providers to participate in drills and safety meetings.

Contributions by:

Steve Hawkins, Eastern Region Manager

Tim Williams, Division Manager, Process Safety Management (PSM)

For more information, contact Stellar:

(904) 260-2900

(800) 488-2900

stellar@stellar.net

stellar.net

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2900 Hartley Road

Jacksonville, FL 32257