Disaster Planning And Response For Food Processors

Wayne Yon, Stephen Blackwell, Daniel Coto & Melvin N. Kramer, EHA Consulting Group, Inc.

Disaster: the word alone congers images of your facility in the worst possible condition; people not understanding what happened, not knowing how to respond to the event or what to tell the media, if anything, and more. But it doesn't have to be that way if you have an emergency plan in place.

What is an emergency versus a disaster? By definition, a disaster is any event causing great harm or damage, a catastrophe; while an emergency is an occurrence demanding immediate actions. An emergency should come with a response plan but a disaster is a situation with no forethought or plan to cover it.

When it comes to emergency planning, you need to involve as many people as possible in framing not only the type and scope of an emergency but also in building a comprehensive plan of action for each of the situations that may arise. There is nothing outside the realm of possible scenarios for an emergency plan. If you want to plan for a meteor landing in the middle of your operation (which is up to you) you need to remember that a plan without a response falls into the category of disaster.

Natural disasters

Natural disasters such as hurricanes, floods, and earthquakes, often impact wide geographic areas and therefore can overwhelm local and state response agencies. This leaves individuals and businesses on their own to deal with the immediate aftermath. Businesses wanting to reopen after such disasters must have comprehensive plans in place to address, at a minimum, the following primary areas: damaged food products, physical facilities, pest control, equipment, and employees.

Damaged food products

The simplest form of advice for damaged food products, following a disaster, is

"when in doubt, throw it out." All food products that were submerged in flood waters must be thrown out. The one exception is canned food where the cans are hermetically sealed and no damage has occurred to the can's seal. The cans must be undamaged, commercially prepared foods, in all-metal cans or retort pouches.

Do not salvage food packed in containers with screw-caps, snap-lids, crimped-caps, twist-caps, flip-top, snap-open, and similar type closures that have been in plastic, paper, cardboard and similar containers that have been submerged or have water damaged packaging.

Condemned food items must be safely disposed of in a manner consistent with federal, state, and local solid waste storage, transportation, and disposal regulations. These products must not reappear as damaged or salvaged merchandise for human consumption.

Physical facilities & equipment

When possible, all salvageable structural surfaces and equipment should be thoroughly decontaminated and sanitized with procedures using chemical sanitization, e.g., chlorine bleach at a concentration of 100-200 ppm (1 tablespoon of bleach in 1 gallon of potable water), Quaternary Ammonium at a concentration of 200 ppm or other approved sanitizers.

- All filters on equipment should be replaced.
- Flush all water lines, including steam water lines and ice machine water lines, for 10-15 minutes.
- Discard all ice in ice machines; clean and sanitize the interior surfaces (ice making compartment and storage bin); run the ice through three cycles; and discard ice with each cycle.
- Run the dishwasher through the wash-rinse-sanitize cycle three times to flush the water lines and assure that the dishwasher is cleaned and sanitized internally before using it.
- Prior to restocking verify that that all refrigerators and freezers are capable of consistently maintaining cold holding temperatures (41°F or in a frozen state).
- Specialized food processing equipment should be cleaned and sanitized.
- Mold contamination is also a concern. Structural components of the building (e.g., walls, piping, ceiling, and HVAC systems) affected by flood waters or other damage from the hurricane, should be cleaned, repaired, and disinfected, where possible. Remove and destroy wall board that has been water damaged.
- Cement walls that have mold damage can be reconditioned.

Pest control

Ensure that any pests that may have entered the facility are no longer present. Remove dead pests and sanitize any food-contact surfaces that have come in contact with pests. Seal all openings into the facility to prevent future entry of

pests. Dispose of contaminated or spoiled foods products in closed containers for removal to prevent rodent and fly food sources and harborage.

Employees

When disasters strike, understand that your employees are likely affected in their personal lives too. They will have family responsibilities and additional stress that should be considered. There will be limitations in staffing and scheduling, so it would be wise not to put all areas back into production, scaling production based on the number and type of employees available.

Food security

Prior to 2001, food security and food safety were viewed as the same. Large food manufacturers were geared to protect their assets: materials, physical plants, employees, information systems and operations. Shipments, incoming and outgoing, were locked to protect from theft. Plants had gates with limited access, employees had identification systems or security guards to check identities, and formulas, product development and equipment designs were not widely distributed.

Since the events of September 11, all food manufacturers had to begin gearing up, thinking about persons who wanted to injure large numbers of people from a single incident or damage an entire brand with negative media attention. Nobody can afford to be reactive any more. The bar is higher now and you cannot think it sufficient to say that you have taken all of the steps toward protecting against those issues as in the past.

Most people focus on the issue of bio-terrorism; more specifically, the intentional incorporation of a pathogen into a food product. The first documented food-related bio-terroristic action in the United States took place in Oregon in 1984, when the Rajneeshpuram community wanted to incapacitate the voting population of the town in order to further their zoning agenda. Over 750 individuals became ill with Salmonella. Two perpetrators were indicted, convicted and spent 29 months in Federal prison.

Since 9/11, the anthrax-laced envelopes and assessments of our vulnerability in our food and water supplies, a rule-out of bio-terrorism is somewhat standard practice in the investigation of food and water-borne disease outbreaks. The FBI responds when a local or state department of health and/or agriculture or another federal agency suspects bio-terrorism.

When we think of bio-terrorism, immediately the infliction of disease by a biological agent is conjured up. However, of equal importance is that of agri-terrorism against either our crops or our animals that are raised for food. Clearly there is concern, especially in the important areas such as the Salinas Valley in California, if someone were to spray our fruit and vegetable crops with a plant pathogen that would cause the crop to fail. In this example, the cost to human health would be negligible but the cost from economic and nutritional perspectives could be disastrous. Therefore, bio-security needs to be in place literally from the farm to the fork.

Simply adding a biological or chemical agent that looks like any ordinary ingredient could contaminate our products. We start with the incoming ingredients that show up in bulk, bag or box. Seals on trucks are a must for large manufacturing or matching the invoice to the actual products that show up on the dock or the back door. Open bags, boxes, missing seals for bulk deliveries, improper invoices could all be signs of product tampering and should be reported immediately to supervision. Under no circumstances should the employee alone determine that product is okay to be used.

Another layer of defense relates to vendors, visitors and even auditors that would gain access to some of the most sensitive areas of the facility. Suspicion is not limited to people outside the normal staff either. Plants need to be aware of any changes in the normal actions and reactions of employees to the everyday occurrences.

We have vulnerability in our food supply from farm to fork whether it be from a natural disaster or from those trying to do us personal, societal or economic damage via terrorism. Every single employee, manager and owner of every single company is on the front lines of food defense and food safety.

EHA Corporate Group (Baltimore, MD) has over 30 years of experience working with the food industry, specializing in crisis management, risk assessment and risk reduction. For more information, visit EHA at www.ehagroup.com *[1] or contact them at* ehacorporate@ehagroup.com *[2].*

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