Is Your Plant Prepared for a Hurricane?

As they roared through the Gulf Coast in 2005, Hurricanes Katrina and Rita didn’t spare industrial plants. The damage they caused helped to boost natural gas and petroleum prices and caused widespread shortages of materials and products. Many facilities in the region sustained severe flood damage, and it was extremely difficult for some plants to obtain the energy and raw materials they needed to restart operations in the aftermath of the storms.

With winds that can top 150 miles per hour, severe hurricanes can cause catastrophic damage to industrial plants in coastal areas and even hundreds of miles inland. The U.S. Department of Energy’s Industrial Technologies Program (ITP) works closely with many industry partners to improve U.S. industrial energy efficiency and environmental performance, and ITP supports national, regional, and local efforts to help plants prepare for these devastating storms.

Planning and Preparing

Manufacturing facilities that plan and prepare for high winds, flooding, loss of power and raw materials, disruptions in infrastructure, and other challenges posed by hurricanes find that they can often minimize damage to their assets. And they can also save lives.

Although each storm is different, it is important to know your plant’s vulnerabilities and how to reduce them. First, assess your plant’s current situation, including your insurance coverage. Then, start formulating plans for preparing your facility; obtaining emergency backup power, supplies, and replacement parts; coordinating evacuations; and shutting down and restarting operations. Take advantage of all federal, state, and local resources that can help you plan and prepare.

A guide produced by the Federal Emergency Management Agency (FEMA) to help protect plants, industries, and businesses outlines several steps you can take in planning, preparing, and implementing your plant’s response to a hurricane. Please see the table on page 2 for a summary of these steps.
Learning from Others
Industrial plants learned some key lessons in 2005 while coping with the effects of the hurricanes. Here are some of them:

- Establish several ways to maintain critical communications with managers, suppliers, and customers both during and after the emergency; consider creating a mobile emergency operations center.
- Prepare for flooding, usually the most serious obstacle to restarting operations.
- Prepare to quickly shut down key utility supplies like air, oxygen, nitrogen, steam, natural gas, and other raw material feeds.
- Establish plant evacuation routes, know the evacuation routes for your city or region, and communicate them to employees.
- Maintain internal contact lists so you can locate employees quickly.
- Maintain current contact information for emergency response groups.
- Investigate how to provide temporary housing, basic amenities, and medical services to employees, if necessary.

Know where you can obtain help, and request assistance from utilities, state emergency management groups, and relief organizations, as needed. If you produce materials critical to restoration, let local emergency operations centers know how you can help. Start planning today!