



LOSS CONTROL BULLETIN

Another loss prevention service from Bollinger, Inc.

www.BollingerInsurance.com

WINDSTORM PREPAREDNESS PLAN #102

When a windstorm crisis or catastrophe arises, it is too late to plan and implement an adequate response in the wake of the confusion, emotional distraction, and muddled coordination. The physical integrity of the property and the continuity of the operations may very well depend upon the effectiveness of a sound pre-planned windstorm crisis management plan.

The two primary goals of a **Windstorm Preparedness Plan** are to protect lives, property, and other assets of the organization; and to ensure a prompt and efficient transition from normalcy to emergency operations and back to normalcy. Failure to implement proper loss control practices can produce a direct, tangible loss that must be paid for in part, or wholly, with dollars that would otherwise be used for operations and investment.

When formulating a **Windstorm Preparedness Plan** for your facility, it is extremely important to understand the effects that the particular crisis or catastrophe could have on the property and continued operations. For instance, a hurricane can be foreseen by monitoring weather forecasts and allow time for efficient implementation of precautionary actions. A less foreseeable crisis that gives less warning, such as a tornado, requires more specialized planning involving the implementation of time related loss reduction controls and procedures designed to reduce loss severity. Properly planning for these crises by implementing pre-loss and post-loss objectives will help you reduce potential losses arising from natural catastrophes.

The **Windstorm Preparedness Plan Checklist** addresses two areas: Pre-emergency actions (including various loss prevention and loss reduction measures), and Post-emergency recovery actions.

The five basic steps associated with developing a formalized Windstorm Preparedness Plan include the following:

1. Obtain management or board of directors' support and prepare a written policy and program.
2. Establish responsibilities and authority to designated personnel, preferably by job title.
3. Organize the plan to handle emergencies and inform employees.
4. Educate and train personnel.
5. Audit and update the plan periodically.

WINDSTORM PREPAREDNESS CHECKLIST

Although the threat of these catastrophe hazards sometimes seem remote, it is always better to be prepared for emergencies before they happen. Don't wait to deal with a crisis. **BE PREPARED.**

FACILITY SUSCEPTIBILITY REVIEW

- ❑ Evaluate all structures (including buildings, amenities, storage buildings, utility buildings, antennas, etc.) as to their maintenance and susceptibility to damage from high winds or collapse from water ponding or snow load. Consider modifications or additional reinforcements to those structures that would be highly susceptible to collapse or wind damage.
- ❑ Regularly inspect the grounds for condition of trees. Dead, dying and diseased trees and dead wood must be removed since these can cause significant damage or personal injury during high winds. For large trees and expansive properties, it is strongly suggested that a tree maintenance program be implemented utilizing a certified Tree Expert and Arborist. Refer to Loss Control Bulletin 105 for additional information.
- ❑ Survey the property to identify equipment, inventory, stock, furniture, decorations, etc. that are kept outside that would be susceptible to damage or being uplifted during high winds. Such items should be listed and actions established for pre-storm precautions.

PRE-STORM PRECAUTIONS

- ❑ Establish a Storm Emergency Team and action plan. Employees should understand their duties for facility protection before a storm; and clean-up, salvage, and restoration operations after the storm.
- ❑ Review and update action plans annually.
- ❑ Develop a list of emergency phone numbers of contractors, and appoint a designated person to monitor weather reports daily.

Buildings

- ❑ Close unnecessary openings and make windows and doors weather-tight.
- ❑ Check windows for broken panes and nail down loose window framing and shutters.
- ❑ Provide storm shutters or board up all windows and doors at first sign of advancing storm.
- ❑ Close all windows on the windward side of a hurricane. During a windstorm, strong winds from a single direction can enter window openings and pressurize the inside of a building. Closing these windows will reduce the possibility of roof uplifting resulting in severe roof damage.

- ❑ Open all windows on the side of the building away from a storm's approach. This helps reduce the dangerous pressure differential. Undertake precautions for water damage.
- ❑ Inspect roof coverings. All loose coverings should be nailed down or covered with sandbags (without blocking roof drains). Roof shingles should be "wind nailed" when installing a new roof.
- ❑ Inspect ballasted (stone) roof coverings. Ensure that roof ballasts are uniformly dispersed. If scoured, the ballast should be redistributed or additional material provided.
- ❑ Inspect roof perimeter flashing. Nail down loose sections. Replace rusted nails or anchor bolts as needed.
- ❑ Brace unsupported structural members with struts, cables or additional diagonal bracing, and laterally support all non-reinforced block walls on both sides at construction sites.
- ❑ Secure or remove work in-progress, temporary storage, temporary structures or trailers, and scaffolding.
- ❑ Roof joist should have metal hurricane straps attached to support beams.

Stock, Inventory, Outside Furniture/Amenities, Storage or Equipment

- ❑ Review inside storage arrangements and relocate all susceptible materials to safe areas away from windows and other openings. Provide skidding for stock that is susceptible to water damage.
- ❑ Remove outside furniture and building amenities (such as awnings, lamps, etc.) that would be susceptible to high winds relocating them to inside areas. Anchor yard storage or furniture that can not be moved.
- ❑ Secure, remove or otherwise protect fine arts and valuables inside, especially those items close to window openings.
- ❑ Secure hoisting or loading equipment such as cranes and bulk cargo loaders.
- ❑ Anchor, brace or secure combustible/flammable liquid tanks.
- ❑ Relocate outside combustible/flammable/chemicals liquid drums or portable containers inside or to a properly sheltered area.

UTILITIES/ELECTRONIC DATA PROCESSING EQUIPMENT

- ❑ Institute an emergency repair program with utility contractors in the event of loss of electric or gas power, telephone services or public water supply.

- ❑ Anticipate worst-case scenarios and evaluate the need for systems providing emergency power.
- ❑ Ensure data processing software, files, records, etc. are properly backed up and transported offsite to a “safe” location.
- ❑ Shut off all gas supplies.
- ❑ Shut off electrical equipment in areas that might be flooded. If the entire facility is exposed, shut off building power at the main building disconnects.
- ❑ Shut off all flammable and combustible liquid and gas lines at their source to prevent the discharge of such materials from piping broken by windblown debris. Support or protect exposed piping, if possible.
- ❑ Establish a reserve fuel supply equal to the normal supply or provide a safe alternate fuel source for sufficient duration.
- ❑ Fill emergency generator or other back up power source fuel tanks.

FIRE PROTECTION EQUIPMENT/DOMESTIC WATER LINES/PLUMBING

- ❑ Keep fire protection equipment operational. Install barriers around sprinkler risers and control valves to protect them from floating debris from possible floodwater.
- ❑ Inspect and repair all fire protection equipment. Activate all systems as soon as possible.

The following precautions are needed in the event of flooding caused by the windstorm:

- ❑ Lubricate sprinkler control valves and locks to reduce future rusting and ensure ease of operation.
- ❑ Label location of outside sprinkler control valves and hydrants for easy visibility. Routinely inspect valves.
- ❑ Protect fire pump equipment or boilers in a flood prone area with sandbags or other diking material.
- ❑ Review location and condition of hand-operated domestic valves that prevent the backflow through plumbing fixtures or drain sewers. Install valving if necessary.
- ❑ Clear floor and yard drains. Monitor these drains during the storm to make sure they remain clear.
- ❑ If water is expected to enter the facility despite all physical barriers, apply a rust preventative compound to pumps, blowers and compressors that can't be relocated.
- ❑ Develop an emergency contingency plan in case the surrounding area is impassable.

- ❑ Contact manufacturers and contractors of critical machinery to establish a contract for priority support with backups.

POST-STORM ACTIONS

- ❑ Immediately initiate salvage activities including: Returning fire protection systems to service; looking for downed live power lines, leaking flammable liquid or gas transfer lines, and structures in danger of collapse; separate damaged materials from undamaged materials; covering equipment and stock that is now exposed to weather; utilizing the “Hot Work” Permit System when necessary, eliminating ignition sources as much as possible; and instituting a fire watch until normal operations are resumed.
- ❑ Develop plans to secure facility against looters and trespassers.
- ❑ Contact your insurance carrier’s Claim Department for adjusting and related services.

IMPORTANT NOTICE - The information and suggestions presented by Bollinger Inc. in this Loss Control Bulletin are for your consideration in your loss prevention efforts. They are not intended to be complete or definitive in identifying all hazards associated with your club, preventing workplace accidents, or complying with any safety related, or other, laws or regulations. You are encouraged to alter them to fit the specific hazards of your club and to have your legal counsel review all of your plans and club’s policies.