

Developing a Cold Weather Plan

A cold weather plan for your facility should be an integral part of your overall maintenance plan for the building and equipment as well as part your emergency response/contingency plan that helps your business respond to and manage an emergency event. Here are some tips to help you develop your cold weather plan.

Creating the Plan

Develop a written plan to include actions to be taken during these junctures:

- Before the onset of winter
- When a winter storm is imminent and/or damaging cold temperatures are expected
- After a winter storm and/or prolonged cold weather

A plan is only as good as its execution. With that in mind, it is critical to the successful mitigation of damage to your facilities from the winter weather to include the following elements as part of your Cold Weather Plan:

- Accountability for overall implementation, including pre-winter inspections
- Defined roles and responsibilities for outlined activities and responses
- Initial and annual training
- Annual review of plan to include evaluation of effectiveness and identifying improvement opportunities

To aid you in developing your plan, ask your team to consider some “what ifs,” such as:

- What if you lose heat to the building? What is your contingency plan?

- What if the facility is closed (weather, holidays, etc.) AND extreme weather is expected? How will you monitor your facility? Will someone be checking on the facility daily?
- What if a fire protection sprinkler pipe freezes and bursts? Is there someone on the premises who knows how to shut the system off? What about other systems that use water?
- What if there are areas that you know could be susceptible to freezing? How are you going to monitor them and what steps are you going to take should the temperature become dangerously low?

Before the Onset of Winter

Inspect the Building

Develop a checklist to ensure:

- Openings around exterior walls such as windows, doors, or other openings are sealed
- Equipment penthouses are secured from cold air infiltration
- Louvers are closed or sealed
- Dampers on ducts leading to the outside are closed (if possible)
- Attics and other areas susceptible to the cold are properly insulated

- Adequate air flow to maintain heat in all areas of the building to a minimum of 40°F
- Roof is in good condition or make repairs as needed
 - Drains, drain pipes, and gutters are free of debris
 - Roof cover is free of cracks or blisters
 - Decking is free of rust or other signs of deterioration
 - Flashing is secured
 - There are no cracked or bent roof supports (beams, columns, joists)

Check Utilities and Process Equipment

- Check and repair heating systems as needed to include boilers, furnaces, ovens, process heaters, etc.
- Inspect process, water, condensate, steam lines subject to freezing for proper insulation or heat tracing
- Drain, blow out, or flush lines for seasonal or idle equipment
- Check alternate fuel supplies for operability and supply adequacy

Check Water-Based Fire Protection Equipment

- Make sure all your equipment has been checked in accordance with national fire protection association (NFPA) 25, Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Equipment
- Be certain that central station water flow alarms are working properly
- Ensure areas including concealed spaces (attics, above false ceilings, under raised floors, etc.) are heated to 40°F or greater
- Dry sprinkler systems
 - Drain water from low point drains
 - Ensure piping is properly pitched and replace broken or missing pipe hangers

- Check system for air leaks and repair if needed
- Make sure low air pressure alarm is functioning
- Fire pump
 - Check pump house temperature
 - » Electric engine driver—should be maintained at 40°F or greater
 - » Diesel engine driver—should be maintained at 70°F or greater
 - Ensure suction source is protected from freezing

Identify and Align Resources

The time to identify needed resources is before the winter season starts. Resource needs are going to vary depending on your location and operations. You may need resources such as:

- Qualified contractor to remove snow and ice from the roof
- Emergency generator
- Fuel supplies for critical operations such as fire protection equipment, processes, or on-site generators
- Snow removal services to ensure access to the property

When a Winter Storm and/or Deep Freeze Is on the Way

- Monitor weather reports for information to include power outages, potential damage, access to facilities and prepare for action
- If needed, activate the emergency response team
- Monitor temperatures in areas susceptible to freezing or significant temperature fluctuations

- Monitor snow loads of roofs, especially in areas subject to drifts, and take action as needed
- Clear snow from outside sprinkler control valves and hydrants to keep them accessible
- Prepare for possible power outage
- Remove ice dams

After the Storm

- If needed, conduct a damage assessment and secure resources to complete repairs
- Initiate salvage operations
- If power was lost, make sure you have a plan to bring electrical loads back on line to prevent power surges that could damage equipment

For additional resources on cold weather hazards and developing a contingency plan visit the Hanover Risk Solutions website under [Preparing for Severe Weather](#).

▶ To learn more about Hanover Risk Solutions, visit hanoverrisksolutions.com



AIX, Inc.
www.aixgroup.com

5 Waterside Crossing, Suite 201
Windsor, CT 06095

860.683.4250 Phone
860.683.4453 Fax

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