

Spring Weather Preparedness & Response

Flood Safety Planning Checklist

Some pre-flood safety steps to take in preparation for spring thunderstorms and flooding include:

Put someone in charge of monitoring the weather.

Have someone in your organization monitor the weather so that you can implement your plans and preparations in the event heavy rain, snow, or melting ice are forecasted. Local news and governments are a good source of information for expected large scale flood events. Smaller, more local events also need to be considered. Keeping an eye on weather forecasts for isolated events, such as unusually strong thunderstorm activity in your local area, can be very beneficial. Have a plan for maintaining communications, especially where weather can impact normal communication systems. Identify and communicate with all of your locations that can be impacted so that they can prepare.

Assess the scenarios for all your locations.

The threat of flood will likely vary by location. For each facility, you need to determine:

- If your property is in a flood zone. Learn more at the FEMA Flood Map Service Center.
- The likely flooding situations that could occur
- The anticipated advance warning time
- The expected or historical water levels
- The expected duration or historical durations
- The parts of the facility and infrastructure that can be impacted

Your local government should be able to assist you. The Federal Emergency Management Agency also has many resources that may be useful.

Establish a flood preparation action plan.

Use an action plan to assign responsibilities to reliable personnel. Have these individuals trained on an initial and ongoing basis, especially if any of your facilities are flood prone. Communicate the action plan and any updates so all employees can be safe if a weather event occurs.

Plan for safety.

Develop an evacuation plan, and conduct training so that employees know how to respond in case of emergency. Learn more about how to protect employees during flood conditions.

Inspect and prepare your property before a flood event occurs.

Look for conditions that can make your facility or property more susceptible to the effects of flooding. These may include water entering the facility through drains and sewers before the water reaches the building; water entering through foundations, walls, or roofs; and surface water entering the building through wall openings. Outside equipment pits and tanks can also be impacted and need to be thoroughly inspected and safeguarded. If you identify defects or conditions that could exacerbate the flooding of your property, and they can be remedied, this should be done well ahead of the event. Some of these may include:

 Inspect roofs for damage that can make them more susceptible to leaks, ponding and wind damage. Roof drains should be cleared of any debris, as should the general roof area, to prevent debris from washing into the roof drainage system. Flashings, copings and membranes that are damaged or loosened should be properly secured to help prevent wind and water damage. If the roof structure has been structurally compromised, have





permanent repairs verified by an engineering analysis and have the repairs made.

- Inspect building openings, such as doors, windows, and siding materials for damage that can make them more susceptible to leaks and wind damage. Inspect doors and windows to ensure that the penetration of cold air is not likely to exacerbate freezing problems and waste energy. Make permanent repairs if possible or take temporary measures to secure these areas before a weather event.
- Prepare the facility for the expected flood:
 - Relocate equipment, stock and important records that can be impacted by the expected flood event.
 - If sewers and floor drains are equipped with a backwater prevention device, ensure that these measures are in good working condition.
 - Verify that all sump pump equipment is in good working condition.
 - Prepare for the safe shut down of building and site utilities, such as gas and electric (consult your utility supplier to assist you with this shut down).
 - Verify that emergency power systems are in good working condition and supplied with adequate fuel.
 - Verify that emergency communications are in place and in good working condition.
 - Prepare fire protection systems if needed and ensure that they are in good working condition so that they can be kept in service as long as possible.
 - If your property is in a flood prone area and is equipped with flood gates or barriers, these should be inspected to ensure they are in proper working condition. Make sure that personnel are assigned to track weather forecasts and deploy flood proofing measures

or plans, and that they are well- informed of their responsibilities. If you have supplies and equipment to deal with flood problems, check these to ensure they are in good working condition. If you anticipate needing items such as flashlights, chargers, emergency generators, sump pumps, sandbags, or food and provisions for on-site staff, acquire them now.

- On the exterior of the facility, check storm drains, clear debris that could block them, and remove or secure loose items that could be blown about by wind.
- Secure outdoor sites and equipment. If you have construction activities underway, make sure the job site is secured before the flood event hits your area. Make sure all contractors have plans in place and properly secure their equipment, materials, and supplies.
- Have a post-event plan to return your operations to order. Have supplies and equipment ready to clean the site and the building; inspect the electrical systems, gas service and other utilities and safely have them reactivated; dry out the facilities to prevent mold and mildew from causing issues in the future; and return fire protection systems to working order as quickly and completely as possible.
- Have a plan in place to control fire hazards after the flood event. This should include managing debris left on the site, managing the use of hot work for repairs like welding and metal cutting and postponing more hazardous operations until all fire protection systems are restored to service.
- Conduct a post-event recovery review. After the plan is executed and things are back to normal, evaluate the results and make necessary adjustments to improve the response should another event occur in the future.

If you have any questions or would like additional information, please contact your local PMA Risk Control Consultant or reach out to us at heretohelp@pmagroup.com.

PMACOMPANIES.COM

IMPORTANT NOTICE

The information and suggestions presented by PMA Companies in this risk control technical 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 business, preventing workplace accidents, or complying with any safety related or other laws or regulations. You are encouraged to alter the information and suggestions to fit the specific hazards of your business and to have your legal counsel review all your plans and company policies. PMA Companies and Old Republic Companies do not provide legal advice and the information and suggestions in this bulletin should not be construed as such.

PMA COMPANIES (PMA) is a trusted leader and recognized expert in commercial risk management insurance solutions and services. PMA specializes in Workers' Compensation, Commercial Auto, General Liability, Commercial Package & Umbrella coverages as well as offering Claims Administration and Risk Management services. PMA Companies is part of Old Republic International, a Fortune 500 company (NYSE: ORI). ORGIG.COM

