



Purpose

This planning guide outlines the steps to be taken before, during and after an internal water leak event; with proper planning, both property damage and business interruption can be minimized. As with all emergency response plans, water leak emergency response plans should be reviewed and updated annually to ensure all responding persons are properly equipped and aware of their responsibilities.

A water leak emergency response plan should include, as a minimum, the following:

- Facility details including company name, location name, address, and revision dates.
- 2. Documentation of the location of various water piping, including domestic, fire protection, and heating/cooling systems.
- 3. Inventory of equipment and tools to address the leak.
- 4. Contact details for people with the authority to shut off water.
- 5. Provision for regular training and review of the plan.

Emergency response team

Since business operations may be temporarily interrupted and access to the building restricted, people with authority to activate the plan should be clearly identified, such as in the sample below. Also each contact should have an alternate.

Title	Name	Office#	Mobile#	Home#
Facilities manager				
Assistant facilities				
Plant engineer				
Superintendent				
Security manager				
Security supervisor				

Note: Titles in this table are examples only and should be customized to the specific facility and corporate structure. All persons listed in this table and involved in water leak response should have copies of the plan.

In addition to the list above, key contractors and vendors should be identified in advance, as in the sample below. (In addition, see Cleanup/recovery on page 6).

Key Contractors/Vendors	Phone#	Email
Fire protection contractor		
Plumber		
Electrician		
Cleaning company		
Remediation/restoration		
Claims adjuster		
Insurance broker		
Insurance company		



Pre-planning

The following items should be included in a water leak emergency response plan:

- 1. List of people including their contact details with the authority to shut off water supplies for all shifts.
- Identification of all domestic water/liquids systems in the building, including domestic, heating and cooling systems, fire protection, sanitary drain, steam, condensate, and internal roof drains. Pipes should be labelled to indicate the direction of flow.
- 3. Clearly label all water shutoff valves and pumps domestic, fire protection, heating/cooling systems to minimize the time required to locate valves and shut off water.
- 4. Identification, using a single-line schematic (map) or plot/floor plans, of piping systems and the locations of shutoff valves and pumps, with brief instructions on how to respond to a leak. Depending on the complexity of the building, this should be done floor by floor and/or by riser systems.

- 5. Exercise all critical shut off valves annually to ensure they operate.
- 6. Maintain spill response carts in central locations. Depending on the size of the building, more than one cart may be required. (See Appendix for items to include in spill response carts.)
- 7. Train response personnel on all shifts to ensure they are familiar with valve locations. This should include annual water leak scenario drills to ensure that people involved in responding to water leak incidents are aware of their responsibilities

Mitigation

Upon notification of a water leak, designated personnel should respond to the area to determine its source. The following steps should be followed upon notification of a leak:

- 1. Bring leak response equipment (spill kits) to area and dedicate efforts to diverting and containing water.
- Identify source of leak for example, toilet, sink, domestic water line, or fire water line**) and control valve for water source.
- 3. Obtain authorization and shut down water flow to the leak source. If water cannot be shut off, contact emergency contractors/contacts to assist.
- 4. Concentrate efforts on preventing water spread and dispersing existing water. Leaks from the building structure including roofs, drains, and windows should be addressed by diverting water flow away from the building. Make temporary repairs as necessary to prevent additional water entry.

- 5. Evaluate potential hazards, such as electrical or slip threats, and handle in accordance with authorization from those in charge. Undertake actions where deemed necessary to reduce exposures, such as shutting down the power to area or placing signage.
- Once the leak has been contained, cleanup and restoration efforts should be implemented (see below).

** If the notification originates from a sprinkler waterflow alarm indicating on the fire alarm annunciator, the local fire department should be contacted, and appropriate investigation should commence in case of fire. If there is no fire and the leak involves the fire protection system, personnel should follow impairment handling procedures as outlined in the fire safety plan.



Clean-up and recovery

To ensure prompt salvage and resumption of operations, the following clean-up and recovery actions should be initiated:

- 1. Contact contractors and vendors for clean-up and restoration of affected areas. Also contact others, including tenants and management, to inform them of the incident.
- 2. Create an inventory of damaged building equipment that requires repair or replacement such as electrical, HVAC, and interior finishing.
- 3. Initiate water removal using pumps, wet vacuums, squeegees, and other equipment.
- 4. Initiate dehumidification equipment and/or fans to reduce the likelihood of mold growth.
- 5. Implement contingency plan for extensively damaged areas that may require relocation of operations. Document procedures on how business operations can be made up at other facilities.
- 6. Remove drywall or provide access panels to encourage air movement within walls.
- 7. Initiate drying, cleaning, and application of rust-preventative coatings to mechanical and electrical equipment.

3. Relocate salvageable and undamaged contents/stock and supplies to safe areas.

Damaged building equipment Restoration activity required

- 9. If necessary, based on damages, contact insurance company or internal insurance contact to begin claim process.
- Log the incident for future reference using site incident logging system, if deemed necessary.

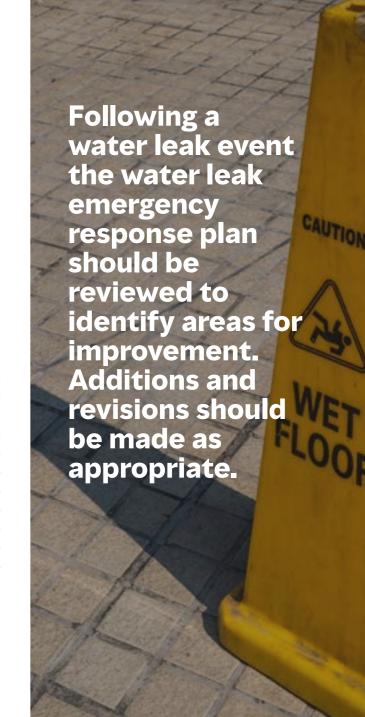
Attachments and supporting documents

The following attachments should be included in the water leak emergency response plan, as appropriate for the complexity of the facility.

- 1. Facility maps.
- 2. Domestic water pipes maps, including valve list.
- 3. Fire protection valve list.
- 4. Spill response cart inventory list (see sample list).

Qty	Materials	Qty	Materials
	Plastic tarps		Caution tape
	Wet/dry vacuum		Duct tape
	Portable sump pump		Face mask
	Dehumidifier		Safety glasses
	Fan		Hose clamp
	Pipe leak diverters		5-gallon buckets
	Hoses		Squeegees
	Latex gloves		Sponges
	Diagrams of roof drains and water supply		Two-way radios; ensure units have fully charged batteries
	Mops		Flashlights

- 5. List of key contractors/vendors, including restoration and cleaning contractors.
- 6. List of equipment suppliers.





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