FREEZING & BURSTING PIPES

Before wintertime approaches is the time to start thinking about cold weather preparations. The possibility of freezing pipes is a specific concern and a hazard that should be addressed every year prior to cold weather.

One characteristic of water is that it expands as it freezes. As water freezes, this expansion puts tremendous pressure on whatever is containing it and causes pipes or fixtures to burst. The resulting water damage is often costly and may involve time consuming repair projects. It has been estimated that insurance companies pay an average of $450 million each year in claims resulting from frozen pipes. A 1/8-inch (3-millimeter) crack in a pipe can spew more than 250 gallons of water per day.

The potential for frozen pipes is not a hazard that is confined to the far northern climates. Many southern territories experience intermittent cold spells that result in frozen pipes in regions where cold weather is normally not severe or prolonged. While frozen pipes can lead to severe damage, this is a disaster that is preventable.

PROTECTING YOUR BUSINESS

PENNSYLVANIA LUMBERMENS MUTUAL
INSURANCE COMPANY

THIS BROCHURE IS PROVIDED AS A SERVICE BY PLM.

FOR FURTHER INFORMATION, CONTACT
THE LOSS CONTROL SERVICES
DEPARTMENT AT PLM, **800.752.1895**

ONE COMMERCE SQUARE
2005 MARKET STREET, SUITE 1200
PHILADELPHIA, PA 19103-7008

MAIN **800.752.1895**
FAX **215.625.9097**
WEB **WWW.PLMINS.COM**

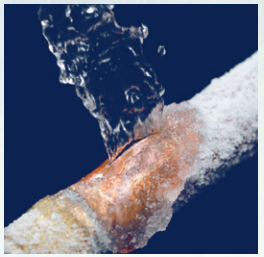
INSURING AMERICA'S WOOD INDUSTRY.

PLM

FREEZING & BURSTING PIPES

PROTECTING YOUR BUSINESS



PENNSYLVANIA LUMBERMENS MUTUAL
INSURANCE COMPANY

FROZEN PIPE **PREVENTION**

Here are some ideas and techniques to prevent frozen pipes and costly repairs in your facility:

- Locate the pipes that are most likely to freeze. Consider exterior walls, crawl spaces, attics, unheated rooms, etc. Insulate the pipes with foam jacketing or utilize heat tape approved by an independent testing organization and safely arranged in accordance with manufacturer recommendations.
- Inspect areas that may normally be unoccupied to check for any openings in walls, roofs, windows, vents, etc., that might allow cold air to enter. Seal cracks that could allow cold air to reach susceptible pipes.
- Provide adequate insulation for unheated areas such as attics, crawl spaces or rooms.
- During extreme cold, let hot and cold water trickle at night since the movement of warmer water prevents freezing. Remember that a hot water supply line is also susceptible to freezing if the water is not moving and the water temperature inside the pipe is cold.
- Avoid what may be a common habit of using low nighttime thermostat settings during cold weather. The extra fuel and heating cost will be minimal compared to the cost of a disastrous frozen pipe incident.

WHAT IF MY **PIPES FREEZE?**

If pipes have frozen, never use a torch or other open flame to thaw the pipe! A fire loss is not the solution to a frozen pipe incident. A licensed and qualified plumber should be utilized if expertise is not available.

Suggested methods of thawing pipes include the use of heating blankets, electric hair dryers, covering pipes with rags and soaking with hot water and the use of safely arranged and approved portable space heaters. Electric equipment or devices should only be used if appropriate precautions are taken to prevent electric shock.

PROTECTING **FIRE SPRINKLER SYSTEMS**

Automatic sprinkler systems may require specialized precautions to ensure that water-filled pipes do not freeze. Here are several precautions and reminders to consider for sprinkler systems.

WET PIPE SYSTEMS

- Verify that all sprinklered areas are heated and that heating systems are in good working order. A minimum temperature of 40° F should be maintained in all areas that have water-filled pipes.
- If your sprinkler system includes an antifreeze loop, the antifreeze should be checked for adequacy each year prior to cold weather.

DRY PIPE SYSTEMS

- Make certain that the sprinkler riser valve house (enclosure) is safely and reliably heated to maintain a temperature of 40° F.
- Drain any water that may have accumulated in overhead piping by using low-point drain valves. Condensation buildup may require that the low-point drains be checked periodically and should especially be checked leading into a time of extreme cold weather.
- The sprinkler piping should be checked periodically to assure that the piping is pitched to drain to avoid any trapped water that may later freeze.

FIRE **PUMPS**

- Make certain that fire pump rooms and enclosures are heated to at least 40° F so that water will not freeze in exposed piping or pumps.
- Provide low-temperature alarm monitoring in the pump house in order to be notified of heating problems.
- Any diesel engine utilized should be fully serviced, batteries charged, battery charger checked, antifreeze tested and fuel tank filled with fresh fuel. Diesel fuel should not be stored longer than 12 months. Consider installing an approved engine block heater to promote quicker starting.

The possibility of frozen pipes is a common hazard. A frozen pipe incident is, fortunately, one that is preventable. The precautions outlined in this brochure are offered to assist in protecting your business.