

LARGE Loss Investigation Form

Water Damage Loss

Type of Loss: Major Water Damage from a Restroom Fitting

Line of Coverage(s) involved in loss: Property

Description and narrative of the loss:

The loss occurred at a Social Services organizations combination conference center and hotel building. This is a five story building in a campus that had recently been purchased by the organization and was not occupied at the time of the loss.

The conference/hotel center was constructed in 1981 and is a total of 86,500 sq ft, with 50 guest rooms. The property was cosmetically renovated approximately 6 years ago; however the plumbing had not been upgraded or inspected. The water damage was discovered on a week-end by a security guard making rounds. The security guard was unable to immediately access the locked hotel room so there was a delay in turning the water off. It is unknown how often the guard performed rounds and if the rounds were recorded.

The determined cause of the loss was a cracked plastic coupling on a toilet water supply line in a guest room on the third floor. There was no indication of freezing and the room heating was reported to be set at 68 degrees F. Damage included flooding of 6 guest rooms on the floor of origin, 5 rooms on the second floor and 5 rooms on the first floor in addition to hallways and stairwells. Additional damage was noted in pipe chases and the exterior façade.

What are the factors that contributed to the Loss?

- a. **Improper Maintenance & Inspection** – The supply lines were original with no upgrades. In addition, stainless steel lines braided over rubber with threaded steel/brass couplings on both ends are preferred.
- b. **Lack of Training** – The security guard did not have the proper access to the room to shut off the valve and also did not know where the main shut off was located.
- c. **Unoccupied Building** – If a building is unoccupied, there is greater opportunity for emergency situations to go undetected. A security guard should perform hourly rounds nights and bi-hourly during days. The water ran for many hours before being discovered by the security guard.

What controls were missing that would have prevented or lessened the loss?

- a. A formalized facility inspection program would have outlined the need to inspect the couplings and to change out all old and plastic couplings. See Photo #1 below



PHOTO #1

Best Practice - Flexible braided stainless steel outer shield rubber hose (no-burst) supply line with brass couplings.

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- b. As part of the Emergency Crisis Management Plan, the security guard should be given a master key to allow access to all areas of the building. In addition, security guards should always know where the main shut offs are located for all utilities in the event of an emergency.
- c. The guard rounds should have been more frequent and covered a larger footprint of the building.
- d. Buildings should be provided with an automated leak detection system for 24 hour protection. Turning off the main water supply to this facility was not an option due to the requirements of in place mechanical systems.

What recommendations apply for this specific incident?

- a. **Emergency Crisis Management Plan** should be developed and implemented for all areas & situations (fire, bomb threats, inclement weather, miscellaneous emergencies, etc.). Implementation should include training for all employees with drills conducted on a regular basis. Drills will:
 - **Reveal** deficiencies
 - **Improve** level of communication
 - **Assist** in identifying resources that are missing
 - **Evaluate** adequacy of existing plans
 - **Enhance** overall capabilities of the response team
- b. **Formalized & documented facility inspections** conducted on a regular basis. Inspection reports will identify those areas that are often overlooked or forgotten.
- c. **Preventative actions** to prevent a water damage loss:
 - Inspect your plumbing annually, including all pipes and fittings. Replace all those that indicate wear and drips. Do not overly tighten fittings.
 - Replace all plastic couplings with threaded metal couplings as these fail less often than plastic, especially if plastic couplings have been over tightened. Replace all supply lines every 5-7 years.
 - Verify the system water pressure does not exceed the ratings of the pipes and fittings. Excess pressure will cause the fittings to fail.
 - Test angle stops (valves) regularly. They are often made of materials that may fail over time. They should be exercised so they do not become frozen in the open position. See Photo #2 below.



PHOTO #2

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What was the Lessons Learned from the Loss?

- a. **An Acquisition Baseline** should have been completed by a qualified party at the time of purchase to include an evaluation of the plumbing system to identify potential problems before there was a failure. All fittings and seals should have been inspected with an understanding that flexible hose and fittings can become brittle and crack over time.
- b. **Training of the maintenance department** in property conservation and facility inspection is of vital importance. This would have identified the plastic fittings and also the age of the fittings that should have been replaced.
- c. **Training of the security guard** in all aspects of emergency planning and response is very important and must be part of the post orders.
- d. **Standard guard rounds** of bi- hourly days and hourly nights and weekends would have provided earlier warning of the leak and lessened the amount of water damage.
- e. **Automated leak detection** systems should be provided for the building for 24 hour protection.

Visit www.losscontrol.com for additional information and sample forms.

IMPORTANT NOTICE - The information and suggestions presented by Philadelphia Indemnity Insurance Company in this Large Loss Lessons Learned E-Flyer is 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 them to fit the specific hazards of your business and to have your legal counsel review all of your plans and company policies.