



## SCENARIO

On a cold January day, a municipal building sustained heavy smoke, fire and water damage when a fire started in the boiler/furnace room. The fire extended into the walls, adjacent hallway and offices. The fire alarm did not go off, and the fire was not discovered until an employee smelled smoke and went to investigate. Immediately thereafter, everyone was evacuated from the building. Several staff members were treated for minor smoke inhalation. There were several municipal residents in the building as well, one of which who twisted and sprained her ankle.

The damage to the building was significant, which deemed it unsafe for occupancy. Since the municipality did not have a contingency location for business continuity, a rental office space was secured from a private landlord in a neighboring town.

The municipal building that sustained the fire damage was built during the 1970s with standard wood framing. The foundation was concrete. Since the building only contained a crawl space, it was located on the main level of the building. The heating unit was a 23-year-old gas-fired furnace. The extreme cold air temperature stressed the gas furnace system, causing it to continuously operate. The stress of the gas furnace created a spark in the furnace room, which ignited some paper and other combustible materials that had been placed in the room as storage. Other combustible materials and flammable cleaning chemicals stored in the room added fuel to the smaller fire, causing the fire gain momentum.

Unfortunately, the fire alarm did not sound, and the fire was not discovered until an employee smelled smoke and went to investigate. This employee saw smoke coming from around the furnace room door and tried to it, but the door knob was too hot. At this time the employee ran back to the office and told co-workers what was observed. The employee then called 9-1-1 and requested that the local volunteer fire department respond to the building. Approximately two minutes after the 9-1-1 call, the fire department was dispatched to the municipal building for a "smoke condition investigation." Concurrently, another employee pulled the fire alarm in the office. The fire alarm did not sound for the second time.

After several minutes elapsed, staff members communicated to building occupants via telephone, text messaging, email and personal contact that there was a fire and instructed the occupants to immediately evacuate the building. The entire building was evacuated and all persons were accounted for in a matter of 12 minutes prior to the fire department arriving to the scene. The fire department arrived, began firefighting operations, and had the fire under control after approximately 15 minutes. The fire was completely extinguished soon thereafter. Overhaul activities began and further extinguishing methods were used to temper

any hot-spots that were found. Afterwards, the fire department cleared the scene and turned the building back over to the Town's leadership. The Town's building inspector closed the building indefinitely due to extensive fire damage and deemed the building unsafe to occupy. As a result, the Town was required to temporarily rent an office location in an adjacent town.

## INVESTIGATION AND DAMAGES/INJURY

After investigation, the fire alarm system had several maintenance issues:

- The smoke detectors were dirty
- Heat detectors were disconnected in the furnace room to prevent false alarms
- There were several failed / broken relays within the system

In addition, the fire investigation revealed the following:

- The furnace room was overcrowded with combustible and flammable materials
- The Town failed to adhere appropriate spacing requirements.
- The furnace was stressed, which increased the temperature within the room.
- The increased stress on the furnace caused it to malfunction, which caused a spark to ignite and set fire to dry, combustible materials.
- The furnace had a cracked heat exchanger, which possibly created a significant increase in carbon monoxide levels within the room – which in large quantities can be flammable – found to be a contributing factor in the fire, according to the source and origin investigator.
- It was undetermined if a Carbon Monoxide (CO) detector was present. Employees interviewed about the incident deny hearing any type of alarm.
- The Town's fire alarm contract was expired. There were no inspections of the fire alarm or notification equipment completed for at least for 18 months.
- The building sustained significant fire, smoke and water damage and was unusable.

Regarding third-party liability:

- Investigation revealed that the plaintiff most likely fell to the ground, or was accidentally pushed, as employees and community members rushed to evacuate the building.
- The Town received a Notice of Intent to file suit from the plaintiff, alleging negligence, lack of maintenance, and negligence with fire alarm protocols, including failure to protect.

## CIRMA LIABILITY ASSESSMENT

The ultimate reserves for this claim were well over **\$250,000**, including a **\$30,000** settlement made to the injured plaintiff due to the Town's negligence.

## KEY RECOMMENDATION/D/ACTION ITEMS

The following key recommendations are proposed:

- **Maintain a proper contract with the fire alarm third-party vendors:** Proper contractual agreements ensure that the fire life safety systems within facilities are working properly.
- **Conduct regular reviews of equipment's needs:** Work with the contracted third-party vendor to determine if current detection equipment is sufficient and appropriate for the environments they will be or currently are installed in.
- **Develop Emergency Incident Notification Protocol:** Establish a formalized process for notifying building occupants of emergencies in the event that the fire life safety system does not work properly. Determine the current capabilities within the facility regarding making a public address announcement.

- **Storage areas:** Conduct regular assessments of utility rooms and remove combustible and flammable materials.
- **Review and update the Business Continuity Plan:** Business continuity is an organization's ability to ensure operations and core business functions are not severely impacted by a disaster or unplanned incident that can take critical systems offline. Such planning includes evaluating locations to temporarily house business critical functions, which will maintain the ability to provide service to your communities until repairs are made.

*For more information on this topic, please contact your CIRMA Risk Management Consultant or visit our Training & Education Resources at [CIRMA.org](http://CIRMA.org).*

