

TABLE 4 • 2007 LARGE LOSS

Type Occupancy: Special Properties

State: New York

Dollar Loss: \$60,000,000

Month: May

Time: 7:32 p.m.

Property Characteristics and Operating Status:

This vacant, six-story, historic psychiatric hospital was of unprotected ordinary construction. The ground floor area was not reported. No one was in the building at the time of the fire.

Fire Protection Systems:

There was no automatic detection or suppression equipment present.

Fire Development:

This fire started when lightning struck the building during a thunderstorm.

Contributing Factors and Other Details:

Firefighters were faced with a rapidly spreading fire and approximately 26 exposed buildings, many of which were interconnected. The yard hydrant system had been shut down years earlier, forcing firefighters to locate hydrants a distance away.

Type Occupancy: Manufacturing Properties

State: Texas

Dollar Loss: \$50,000,000

Month: February

Time: 2:09 p.m.

Property Characteristics and Operating Status:

No details were reported on this refinery. The plant was in operation at the time of the fire.

Fire Protection Systems:

No information was reported on detection equipment. There was a system of manual water monitors or water cannons that the plant fire brigade attempted to use, but they proved ineffective due to strong winds and fast-spreading fire.

Fire Development:

A crack in an older pipe allowed propane to escape and form a vapor cloud. The cloud drifted and is believed to have ignited when it approached a boiler house.

Contributing Factors and Other Details:

Twenty workers were injured in this explosion and fire.

State: Florida

Dollar Loss: \$40,000,000

Month: July

Time: 9:26 p.m.

Property Characteristics and Operating Status:

This one-story air conditioner filter manufacturing plant was of unprotected noncombustible

construction and covered 185,000 square feet (17,000 square meters). The plant was in operation at the time of the fire.

Fire Protection Systems:

No information was reported on detection equipment. There was a wet-pipe sprinkler system present. The system operated but was ineffective, and the reason was not reported.

Fire Development:

This incendiary fire was set in a first-story storage area.

Contributing Factors and Other Details:

The damage was estimated at \$10 million to the structure and \$30 million to its contents.

State: Indiana

Dollar Loss: \$20,000,000

Month: September

Time: 2:34 p.m.

Property Characteristics and Operating Status:

This four-story plastics manufacturing plant was of heavy timber construction and covered 83,759 square feet (7,782 square meters). The plant was in operation at the time of the fire. Part of this structure was used as a warehouse.

Fire Protection Systems:

There was no detection equipment present. There was a sprinkler system in the building, but the system had been disconnected prior to the fire.

Fire Development:

The fire broke out in an electric motor on a pump and auger set up in the basement of this building.

Contributing Factors and Other Details:

The fire spread through the basement. When the fire spread to and into an abandoned elevator shaft, it spread rapidly to the upper stories. As the fire engulfed the upper stories, command called for firefighters to evacuate to a defensive attack. During the original interior attack, firefighters unsuccessfully used foam in trying to gain control of the fire. Damage was estimated at \$12,000,000 to the structure and \$8,000,000 to the contents.

State: North Carolina

Dollar Loss: \$100,000,000

Month: February

Time: 9:10 a.m.

Property Characteristics and Operating Status:

No details were reported for this packaging plant fire.

Fire Protection Systems:

No details were reported.

Fire Development:

No details were reported.

Contributing Factors and Other Details:

No details were reported.

Type Occupancy: Wildland**State:** California**Dollar Loss:** \$1,800,000,000**Month:** October**Time:** Various**Property Characteristics and Operating Status:**

Wildland urban interface. These 23 major, named wildland fires broke out within a matter of days in different properties. Some fires broke out in forest areas, and some were located in grassy areas in and around power lines.

Fire Development:

These fires had a variety of causes. Information on the cause of each individual fire was not reported, but some were incendiary and some were caused by downed power lines. A vehicle crash and a youngster playing with matches started other fires.

Contributing Factors and Other Details:

Santa Ana winds blowing at 75 miles (121 kilometers) per hour with gusts of over 100 miles (161 kilometers) per hour overwhelmed firefighters early on. The area was also very dry. During the fires, an additional 251 fires broke out but were contained to 10 acres (4 hectares) or less each. A unified command was in place on each fire. Sixteen hundred fire companies were en route to the area in two days from 1,145 fire departments. The fires burned 518,000 acres (210,000 hectares), destroyed 2,180 homes, 6 commercial properties, 922 outbuildings, and 239 vehicles, and damaged another 428 homes, 9 commercial properties, and 74 outbuildings. Ten civilians died and at least 4 other deaths were attributed to the fires, which also injured 128 firefighters and 28 civilians.

State: California**Dollar Loss:** \$350,000,000**Month:** November**Time:** 3:23 a.m.**Property Characteristics and Operating Status:**

Wildland urban interface

Fire Development:

No details were reported.

Contributing Factors and Other Details:

The fire burned 4,900 acres (2,000 hectares) and destroyed 86 structures, of which 53 were residences, 37 were vehicles, and 1 was a mobile home. Another 45 structures, including 33 residences, were damaged. Six firefighters were injured.

State: California**Dollar Loss:** \$150,000,000**Month:** June**Time:** 2:15 p.m.**Property Characteristics and Operating Status:**

Wildland urban interface

Fire Development:

No details were reported.

Contributing Factors and Other Details:

Thirty-one hundred acres (1,254.5 hectares) and 256 homes were destroyed, 35 homes were damaged, 67 commercial properties were destroyed or damaged, and 3 civilians were injured.

State: Georgia**Dollar Loss:** \$80,436,951**Month:** April**Time:** 1:30 p.m.**Property Characteristics and Operating Status:**

Wildland

Fire Development:

This fire was ignited by a fallen power line. This fire burned through grass, timber, and swamp land, spreading into Florida. This fire ultimately became known as the Georgia Bay Complex.

Contributing Factors and Other Details:

At the time of the fires, Georgia was experiencing a drought, and the fire danger level was listed as extreme. A total of 564,450 acres (228,400 hectares) burned, of which 441,705 (178,750 hectares) were in Georgia.

State: California**Dollar Loss:** \$60,000,000**Month:** January**Time:** 5:01 p.m.**Property Characteristics and Operating Status:**

Wildland urban interface

Fire Development:

No details were reported.

Contributing Factors and Other Details:

This fire destroyed six large mansions, which contributed to the high dollar loss.

State: California**Dollar Loss:** \$31,000,000**Month:** March**Time:** Not reported**Property Characteristics and Operating Status:**

Wildland

Fire Development:

No details were reported.

Contributing Factors and Other Details:

No details were reported.

Type Occupancy: Residential Properties**State:** Alaska**Dollar Loss:** \$27,000,000**Month:** June

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Time: 3:00 p.m.

Property Characteristics and Operating Status:

This was an occupied 4-story, 49-unit apartment building. The ground floor area was not reported.

Fire Protection Systems:

There was full-coverage smoke detection equipment, which activated. There was no automatic suppression equipment.

Fire Development:

This fire broke out in a dining room wall in a fourth-floor unit when a plumber's torch ignited cellulose insulation as he was sweating a valve on a pipe. The fire traveled up the wall and across to an elevator shaft and then through the roof.

Contributing Factors and Other Details:

High wind pushed the fire across the entire roof. Unobstructed chases allowed the fire to travel throughout the building. The damage was estimated at \$22,000,000 to the structure and \$5,000,000 to its contents.

Type Occupancy: Store & Office Properties

State: Illinois

Dollar Loss: \$32,447,000

Month: May

Time: 12:03 p.m.

Property Characteristics and Operating Status:

This was a 20-foot (6-meter) high, 20,250-square-foot (1,881-square-meter) lumber yard of unprotected ordinary construction. The yard was operating.

Fire Protection Systems:

Neither automatic detection nor suppression equipment was present.

Fire Development:

Investigators reported this fire as suspicious in nature. The fire originated in a corner of the lumber yard in an open lumber shelter. The fire spread rapidly to adjoining shelters and to several mobile offices located outside the property.

Contributing Factors and Other Details:

Arriving firefighters not only faced a large fire but also exploding propane tanks, some still on the forklifts; downed power lines; and a loss of water when a water main broke early in the incident. Water flow was reestablished when hose lines were tied into an adjoining town's water supply. The original attack lines the fire department used could not control the large volume of fire firefighters found when they arrived. Additional alarms were sounded for mutual aid equipment. The fire spread to several vehicles in the yard and into the main store. One firefighter was injured. Loss to the structure was \$10,746,000 and loss to the contents of the fire building and to eight exposure buildings was \$21,701,000.

State: Massachusetts

Dollar Loss: \$26,000,000

Month: July

Time: 4:14 a.m.

Property Characteristics and Operating Status:

This three-story, irregularly shaped former mill building was used by 56 mercantile businesses and covered 350,000 square feet (32,516 square meters). It was of unprotected ordinary construction. The building was closed at the time of the fire.

Fire Protection Systems:

There was no smoke detection equipment present. There was a full-coverage, combination wet- and dry-pipe sprinkler system. A sprinkler valve in the area of ignition was padlocked shut, allowing the fire to quickly overwhelm the rest of the system. The fire department was not notified that the system was shut down.

Fire Development:

Investigators believe the fire started after welding, done without a permit from the fire department, was done in the basement the day before.

Contributing Factors and Other Details:

Several code noncompliance issues, such as the welding and shutting down the sprinkler system, contributed to the fire. Four hundred firefighters from 78 fire departments in two states responded to this fire. Nine firefighters were injured. The loss was estimated at \$16,000,000 to the structure and \$10,000,000 to its contents.

State: District of Columbia

Dollar Loss: \$20,000,000

Month: April

Time: 12:56 a.m.

Property Characteristics and Operating Status:

This one-story historic market place covered 27,810 square feet (2,580 square meters) and was of heavy timber construction. The building was closed at the time.

Fire Protection Systems:

A local fire alarm system was present. No further information was reported. There was no suppression equipment present.

Fire Development:

The cause and origin of the fire was undetermined.

Contributing Factors and Other Details:

Arriving firefighters initiated an interior attack but soon were withdrawn to a defensive attack, due to deteriorating fire conditions.

Type Occupancy: Basic Industry, Utility Properties

State: Illinois

Dollar Loss: \$60,000,000

Month: November

Time: 6:52 p.m.

Property Characteristics and Operating Status:

This was a five- and six-story city power plant of unprotected noncombustible construction. The building covered 80,000 square feet (7,430 square meters) and was operating at the time of the explosion and fire.

Fire Protection Systems:

No automatic detection equipment was present. There was a partial-coverage sprinkler system in the building, but it was not located in the area of the fire. It was not reported if the system operated.

Fire Development:

This explosion and fire occurred when an unknown type of mechanical failure ruptured a hydrogen line. The ignition sequence is still under investigation.

Contributing Factors and Other Details:

None reported.

Type Occupancy: Educational Properties

State: Arizona

Dollar Loss: \$34,000,000

Month: November

Time: 12:48 p.m.

Property Characteristics and Operating Status:

This three-story, multi-occupancy college building of protected noncombustible construction included a food court, a student union, and conference rooms. The ground floor area was not reported. The building was in full operation.

Fire Protection Systems:

There was complete-coverage automatic detection equipment present, along with manual pull stations. This system was reported to have operated as designed. There was a partial-coverage wet-pipe sprinkler system present. The system was not in the area of the fire and did not operate.

Fire Development:

A fire of suspicious origin broke out in a second-story storage room involving some stored plastic chairs.

Contributing Factors and Other Details:

Approximately 5,000 people evacuated safely during the fire.

Type Occupancy: Storage Properties

State: Maryland

Dollar Loss: \$20,000,000

Month: June

Time: 7:47 p.m.

Property Characteristics and Operating Status:

This warehouse was a 20 feet (6 meters) high, covered 20,000 square feet (1,860 square meters),

and was of unprotected ordinary construction.

It was attached to another 80,000-square-foot (7,430-square-meter) warehouse of unprotected, noncombustible construction. Both were closed for the night.

Fire Protection Systems:

Automatic detection equipment was present, but the type and coverage were not reported. A complete-coverage combination wet- and dry-pipe sprinkler system was present. Neither system was operational, but no reason was reported.

Fire Development:

The fire broke out in a first-level electrical service panel area. Some type of electrical failure ignited nearby combustibles.

Contributing Factors and Other Details:

One firefighter was injured. The loss was reported as \$10,000,000 to the structure and \$10,000,000 to its contents.

State: Washington

Dollar Loss: \$20,000,000

Month: July

Time: 5:30 p.m.

Property Characteristics and Operating Status:

This was a fuel storage warehouse. No additional details were reported.

Fire Protection Systems:

No details were reported.

Fire Development:

No details were reported.

Contributing Factors and Other Details:

No details were reported.

Type Occupancy: Vehicles

State: California

Dollar Loss: \$100,036,000

Month: April

Time: 3:45 a.m.

Property Characteristics and Operating Status:

This fire involved a gasoline tank truck on an interstate highway at a point where several levels (a maze) of overpasses pass over each other or nearby.

Fire Development:

Following a crash of the tank truck, the gasoline ignited. The intense fire weakened structural members of the overpass, causing a collapse of the roadway. Firefighters used ladder pipes and large-capacity hand lines to cool surrounding structures to minimize the possibility of further collapse.

Contributing Factors and Other Details:

Firefighters monitored run off and nearby storm drains to minimize environmental impact. The truck driver escaped the crash, suffering burns.