

CASE STUDY



AIR PURIFICATION: MUNTERS CLEANS AIR IN TRINITY BUILDINGS AFTER TRADE CENTER DISASTER NEW YORK, NY

BACKGROUND

On September 11, 2001, millions of Americans watched in horror as New York City's twin World Trade Center Towers collapsed. No image was longer lasting than the horrific plume of smoke and dust that spewed above the city and hung above the skyline for more than a week.

"Ground Zero" quickly became a term that all Americans would recognize as the site of the giant ruin left in place of the fallen towers. As a convoy of trucks began to clean up "Ground Zero," many buildings adjacent to the disaster zone faced a different kind of recovery.

While they had not suffered substantial physical damage, many of the buildings surrounding "Ground Zero" faced contamination from the giant cloud of smoke and dust that had filled the air for days after the attack.

The Trinity Buildings, located just one block from "Ground Zero," were among them.

About one block away from "Ground Zero," New York City's Trinity Buildings were engulfed by the giant cloud of smoke and dust that resulted from the Trade Center disaster. On the Trinity Building roof, the effort to clean up the rubble was visible for months.

THE PROBLEM

At 111 and 115 Broadway, the Trinity Buildings had been immersed in the giant cloud of smoke, dust and debris for days after the destruction of the two towers.

Except for the north side of 115 Broadway, which faced the collapsed buildings and had windows broken by flying debris, the buildings were not damaged from the event.

"The buildings were saved from severe smoke damage," said Mike Conlon, Munters district manager for NYC, "because management turned off the HVAC system after One World Trade Center was hit by the first aircraft. By doing so, the system wasn't running during the collapse, and thus did not draw in additional smoke and dust."

Despite the fast work of the property managers, clouds of smoke and dust were forced into the structures. This left a serious concern for the health of buildings' workers and the cleanliness of the office space.

THE SOLUTION

Munters was called to provide extensive smoke neutralization, sanitization and deodorization before tenants could reoccupy the buildings. After an analysis of the situation and discussion with building management, Munters addressed the problem with a two part process.

First, Munters set up air scrubbers on 20 floors of the building and then built an air moving system to circulate the interior air through them. The air scrubbers contain both carbon and HEPA filters, which are capable of removing extremely small particles from the air.

Second, to eliminate the smell of smoke, Munters used wet and dry fogging processes. A chemical agent is turned into a "fog" by application equipment. The dry fog permeates the entire indoor space, reaching deep into even "the nooks and crannies" of the sealed area, neutralizing the smell of smoke. In a supplementary process, Munters technicians also used a wet fog spray to eliminate the smoky odor.

"Our services helped return the air to a cleaner, more pleasant condition for returning workers," said Mike Conlon. "Building management felt



Munters technicians change the HEPA filter in an air scrubber. Air scrubbers were used to remove fine dust particles from building air.

that this was helpful in making tenants feel safe when reoccupying their offices."

During the same period, Munters used a similar air scrubbing process at the Pentagon. There, Munters both reversed significant water damage and decontaminated the air.

THE BENEFITS

Munters, the world's largest water damage recovery company, has recently added smoke and air treatment capability to its drying services. As experts in air treatment of any kind, Munters can respond to damage from water, humidity, smoke, and dust after fires, floods, and other disasters. Call on Munters for these advantages:

■ Fast Recovery

Munters will arrive within hours of the disaster. Many times recovery activities can begin the same day, limiting deterioration and saving time as well as money. Munters can be reached 24-hours a day at 1-800-I-CAN-DRY.

■ Advanced Expertise

Munters is the leader in disaster and emergency air treatment services. We can create the conditions you require by cleaning the air, dehumidifying or controlling temperature. No company has more experience building temporary air treatment systems.

■ America's Largest Fleet

Munters has the largest fleet of air treatment and water damage equipment in the world, with operations in more than 26 countries. In the United States we have equipment stationed from coast-to-coast in over 30 locations. So, we can get the right equipment to your site, fast!

■ Reduce Microbiological Problems

Munters has extensive knowledge of abating post-disaster microbiological problems. The growth of many bacteria and molds can be stopped if fast action is taken. This can save millions of dollars and keep building occupants safe.

■ Back in Business, Fast!

Munters puts your building back in use, fast. We eliminate problems and restore materials. Munters' fast action avoids months of costly reconstruction; saves the replacement cost of new materials, and precludes the expense of relocation.



Chemical agents were used to "fog" interior space, neutralizing the smell of smoke.

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