

**Statement of Patricia Clark
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Before the

**House Committee on Education and Labor
U.S. House of Representatives**

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Mr. Chairman, Members of the Subcommittee:

Thank you for this opportunity to discuss OSHA's role in protecting workers after the terrorist attacks at the World Trade Center (WTC) on September 11, 2001.

My name is Patricia Clark and I am the OSHA Regional Administrator for Region II, which covers New York, New Jersey, Puerto Rico and the U.S. Virgin Islands. OSHA's mission is to assure safe and healthful working conditions for employees in this Nation. The attack on the World Trade Center was an unprecedented catastrophic event, and the vast majority of victims were on-the-job. The size and scope of the response to the attack involved response workers, uniformed services as well as private contractors, all of whom were engaged in a rescue and recovery operation. Within hours of the attack, OSHA joined with other Federal, state and local agencies, as well as safety and health professionals from contractors and trade unions on site, to assist in protecting workers involved in the recovery, demolition and clean-up operations.

Consistent with the Federal Response Plan and National Contingency Plan, OSHA "made available safety and health specialists to provide safety-specific assistance," including "safety consultation and training programs, air contaminant sampling and analysis and other services" during rescue and recovery work at the WTC site and later at the Staten Island Landfill. It was apparent that workers engaged in these operations would not be working in a conventional setting and that the WTC site was not a typical construction or demolition project. Employees at the WTC site needed immediate protection from safety and health hazards, the scope and severity of which were unpredictable.

OSHA's primary responsibilities at the site were to perform personal air monitoring, characterize exposures, distribute and fit respirators along with other personal protective equipment, and conduct safety monitoring. Throughout the course of the recovery and clean-up phase, OSHA dedicated more than 1,000 safety and health professionals to the response. Our employees remained on site for ten months, providing a 24-hour presence, seven days a week. OSHA staff spent more than 120,000 hours at the site while the OSHA's Technical Center in Salt Lake City also worked around the clock to expedite sampling analysis and results.

Between September 2001 and June 2002, OSHA conducted more than 24,000 analyses of individual air samples to quantify worker exposure to contaminants. Personal sampling was conducted around the clock each day by industrial hygienists and supplemented by bulk samples, area samples, and direct instrument readings. The agency collected more than 6,500 air and bulk samples to test for asbestos, lead, other heavy metals, silica, as well as inorganic and organic compounds, totaling 81 different analytes.

OSHA coordinated its sampling with that done by safety and health professionals from other environmental and health agencies of the Federal government, New York State and New York City, and from trade unions and contractors. Employee exposure to respiratory hazards was measured during search and recovery operations, heavy equipment operations, torch cutting of structural steel, manual debris removal, wash-station operations and concrete drilling. Debris from the WTC site was taken to a landfill on Staten Island for sorting and disposal. OSHA conducted safety and health monitoring at that site as well.

OSHA's breathing zone samples revealed exposures well below the Agency's Permissible Exposure Limits (PELs) for the majority of chemicals and substances tested. For example, OSHA collected more than 1,400 air samples to test for the presence of asbestos. All results were well below OSHA's PEL for that substance. In more than 700 samples taken to test for the presence of organic compounds such as formaldehyde, benzene, and acrylonitrile, only one benzene sample of the 244 taken was found to be near OSHA's PEL. About five percent of the 1,331 samples taken to test for the presence of metals collected on the site exceeded the PELs for copper, iron oxide, lead, zinc oxide, antimony and cadmium. While OSHA does not have the authority to mandate the use of respiratory protection for everyone working on the site, the WTC Emergency Project Environmental Safety and Health Plan, established in partnership with unions, contractors and federal, state and local agencies, *required* respiratory protection for workers covered by the Plan.

OSHA employed a variety of methods to keep workers fully informed about potential hazards and risks. OSHA distributed sampling-result summaries to workers and their trade unions, site contractors, and all responding public agencies, such as the New York City Police Department and the Fire Department of New York, during daily safety and health meetings. Employees whose exposures were sampled were asked to provide OSHA with their mailing address and were notified in writing of their personal sampling result. They were also given a contact number at OSHA to use if they desired follow-up information. Employees whose sample results exceeded the PEL were encouraged to seek medical consultation. OSHA also posted sample results on its Web site (www.osha.gov) within eight hours after they were determined.

The respirators workers were provided were selected jointly with safety and health professionals from a variety of organizations including the New York City Department of Health, the National Institute for Occupational Safety and Health (NIOSH), private contractors, and trade unions. All stakeholders agreed on a high level of protection, requiring a half-mask, negative-pressure respirator with high-efficiency/particulate/organic vapor/ acid gas cartridges. The requirement, along with other safety measures, was communicated through notices posted throughout the site. (*See Exhibits 1-7*) OSHA continued to conduct extensive risk assessment through air and bulk sampling and monitoring to verify that the respirators were providing an appropriate level of

protection. For example, when sample results for jack-hammering and concrete-drilling operations indicated that a higher level of protection was necessary, a full face-piece respirator was required for those operations.

Shortly after the terrorist attack, the New York City Department of Health requested that OSHA be the lead agency for distributing, fitting, and training for respirators for the recovery workers. OSHA assisted 4,000 workers daily at the peak of recovery operations. During the ten-month recovery period, OSHA distributed more than 131,000 respirators. OSHA also worked closely with the private sector by requesting respirator donations from the leading manufacturers, and many responded generously.

Distribution of respirators to workers posed challenges. OSHA initially deployed staff by foot with bags of respirators, followed by mobile teams on all terrain vehicles (*Exhibit 8*). We also established a distribution point at the Queens Marina, which was the Fire Department of New York's staging area. OSHA opened multiple equipment distribution locations throughout the sixteen acre site (*Exhibits 9 and 10*).

During the recovery, OSHA conducted more than 7,500 quantitative fit-tests for respirators, including nearly 3,000 for FDNY personnel (*Exhibit 11*). Fit-testing included a facial analysis and a user-seal check as well as instruction on the best way to store and maintain the respirators. OSHA also advised employers and workers on the proper use and limitations of respirators. In addition to respiratory protection, OSHA distributed 11,000 hard hats, 13,000 pairs of safety glasses and more than 21,000 pairs of protective gloves to workers on the site.

Despite the highly dangerous rescue and recovery mission at the WTC, **there was not one fatal accident** during the 10-month clean-up operation. During this period, OSHA identified more than 9,000 hazards and saw that those hazards were corrected. More than 3.7 million work hours were expended during this hazardous and lengthy rescue and recovery mission, yet only 57 injuries were recorded, none life-threatening. This is a remarkable achievement given the nature and complexity of the work at this site including thousands of construction and emergency-response workers laboring each day in close proximity to heavy construction and demolition equipment. OSHA played a critical role in protecting these workers.

The key to success at the WTC site was working in close partnership. OSHA collaborated with city, state and other federal agencies, as well as contractors, unions and trade associations. This collaboration was formalized in the WTC Emergency Project Partnership Agreements, signed in November 2001 and April 2002. They brought together OSHA, the New York City Department of Design and Construction, the Fire Department of New York, the Building and Construction Trades Council of Greater New York, the Building Trades Employers Association, the Contractors Association of New York and the four prime contractors at the site. Through the partnerships, a joint-labor-management committee dealing with safety, health and environmental issues was established to identify hazards and recommend corrective actions. One of the most important results of these partnerships was the very high level of safety and health oversight, training and direct involvement of workers at the site. The development of a strong Labor-Management Health and Safety Committee combined with a steward system created an effective mechanism for worker concerns to be expressed and addressed. The end result was that the lost

workday injury and illness rate (3.1 per 100 workers) was significantly less than the national rate for workers in industries such as demolition (4.3 per 100 workers).

The unique command and control structure at the WTC site created the need for considerable communication, coordination, and cooperation among all involved parties at the site. The OSHA partnership agreements and the WTC Emergency Project Environmental Safety and Health Plan provided the framework and structure for coordinated communication among all involved parties. Weekly reports that tracked the injuries and illnesses at the site were compiled by the Labor-Management Committee and safety-orientation training was provided for all new workers. Safety and health monitoring data were shared among all parties. Safety and health discussions reached individual workers through a weekly bulletin that highlighted issues of concern. (*Exhibits 12 & 13*) Union stewards met weekly, distributed bulletins directly to workers and held toolbox safety briefings based on topical issues.

Formal safety and health training for workers on the project was provided. OSHA and the Center to Protect Workers' Rights (CPWR), the health and safety division of the Building Trades Department of the AFL-CIO, created an Orientation Subcommittee to give safety and health training to all workers at the site. More than 50 instructors were trained to deliver the program to 2,000 workers.

OSHA learned a great deal at the WTC site--lessons that will improve preparations for future national emergencies. First, we confirmed that worker safety and health must be proactively integrated into the planning and operations of emergency response. OSHA requested that worker protection be specifically included in the new National Response Plan, which sets forth procedures for the Federal government in responding to emergencies. A Worker Safety and Health Support Annex was included in the National Response Plan, designating OSHA as the coordinating agency. The Support Annex activities mirror the worker protection efforts implemented at the WTC, including such features as health and safety monitoring, worker training and use of personal protective equipment.

Second, OSHA realized its need for resources and expertise to address worker hazards associated with weapons of mass destruction. OSHA created four Specialized Response Teams comprised of highly trained professionals qualified to assess and mitigate worker risks associated with Chemical, Biological, Radiological and Structural Collapse hazards.

Third, OSHA reaffirmed that employers need effective emergency evacuation plans for their worksites and that they should regularly practice evacuations and review their procedures.

Fourth, OSHA issued its National Emergency Management Plan. This policy directive reiterates OSHA's long standing policy of providing technical assistance and support in the aftermath of disasters. It also required each of OSHA's Regions to develop, implement and execute their own Regional Emergency Management Plan.

Fifth, OSHA's experience at the WTC brought home the importance of routinely fit-testing respirators for emergency responders at all levels of government. It is important to build familiarity with negative-pressure, air-purifying respirators among employees who might not

typically use them. OSHA is endeavoring to establish a culture that emphasizes proper respiratory protection for emergency responders so that they wear properly fitted and maintained respirators when they respond to worksites, similar to the WTC, which may have multiple chemical exposures. A respirator that does not fit properly is not effective. OSHA developed the Disaster Site Worker Training Program to help prepare workers for emergency response and is working with the CPWR to provide skilled-support personnel with the requisite training.

Sixth, OSHA fully supports the National Interagency Management System and its focus on uniformity of response structure and protocol centered on the Incident Command System. OSHA worked with the Department of Homeland Security to define the role of the Safety Officer in the Incident Command System. OSHA has developed in-house expertise and has trained the vast majority of its field staff to intermediate and advanced levels of ICS.

Finally, OSHA and other agencies now realize, as never before, the value of emergency preparedness and response partnerships among federal, state and local agencies, with clear lines of authority for all functions. It is particularly important to improve channels of communication among various levels of government. To be most effective, relationships must be established before the next emergency occurs. That is why OSHA has begun reaching out to the emergency response community throughout this nation. No government agency or private entity can handle catastrophic emergencies alone. We are all in this together.

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Mr. Chairman, in addition to my concern for workers at the WTC site, I have personal interest in the short- and long-term effects of exposures there because my staff and I spent so much time at the site. OSHA's Manhattan Area Office was destroyed when the North Tower of the WTC collapsed on top of us. During evacuation, the agency's employees were exposed to all of the same contaminants in the atmosphere as others who were in lower Manhattan that day.

I can say with confidence and with pride that OSHA staff did everything they believed humanly possible to protect the workers during recovery efforts at the WTC site.

Mr. Chairman, I would be pleased to answer any questions from members of the Committee.