



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION II  
EDISON, NEW JERSEY 08837

OCT 05 2001

Mr. Kelly R. McKinney, P.E.  
Associate Commissioner  
Bureau of Regulatory and Environmental Health Services  
The City of New York  
DEPARTMENT OF HEALTH  
125 Worth Street, Room 616, CN-32  
New York, NY 10013

*Sylvia*  
*Page 9 - Meeting*  
*10/5/01*

Dear Mr. McKinney:

Health and safety concerns for workers at the World Trade Center Disaster Site (WTC) has been a concern from the beginning of the response. In addition to standard construction/demolition site safety concerns, this Site also poses threats to workers related to potential exposure to hazardous substances. Sources of hazardous substances include (1) building materials from the destroyed buildings (primarily asbestos), (2) hazardous materials that were stored in the buildings (refrigerants, hazardous wastes, ethylene glycol, compressed gas cylinders, etc.), and (3) products of combustion being emitted from the fires that continue to burn within the debris piles. EPA, along with a number of other federal, state and your agency, has been gathering information about these threats to worker health. Air sampling by EPA and others indicates that asbestos and other contaminants are present in the air at the WTC. EPA has recommended, and continues to recommend, that workers at the Site wear respiratory protection:

In addition, EPA has recommended, and continues to recommend, that workers utilize personal protective equipment and the personnel wash stations to prevent the spread of asbestos and other hazardous substances from the WTC to their homes, cars, public transportation, food service locations, etc. We have observed very inconsistent compliance with our recommendations, however, we do not have authority to enforce the worker health and safety policies for non-EPA/USCG employees. Therefore, EPA believes the Incident Commander should adopt and enforce a site-wide Health and Safety Plan. If there is anything I can do to assist you concerning this matter, please feel free to call me at (732) 321-6656.

Sincerely yours,

Bruce Sprague, Chief  
Response and Prevention Branch

cc: FCO, FEMA



THE NEW YORK CITY  
DEPARTMENT OF HEALTH

# Memorandum

To: File  
Subject: Environmental Issues Related to WTC Disaster  
Date: October 6, 2001

The following is a report of critical environmental issues related to the WTC disaster.

## **Staten Island landfill evidence gathering site**

All health and safety issues at the Staten Island Landfill evidence-gathering site are now coordinated through an inter-agency Health & Safety meeting held every morning at 11am. Present at the meeting are representatives of NYPD, FBI, Secret Service, DOS, EPA, contractors, etc. A company called Phillips & Jordan (P&J) has a contract with the US Army Corps of Engineers and is assuming overall control of health and safety issues at the site. They have drafted a H&S plan that incorporates elements of existing agency site H&S plans. The final plan is due to be implemented at 1800 hours Sunday 10/06/01. P&J will have 5 H&S field personnel on the ground 24 hours a day, 7 days a week starting today. In addition, P&J has subcontracted to an environmental consulting firm (EE&C) to perform ongoing worker exposure monitoring and recommend activity specific PPE and administrative controls. EPA has installed two personnel wash stations and one vehicle wash station, all of which will be fully operational by COB today. Unfortunately, the evidence gathering operation is located on top of the largest municipal landfill in the world. The Incident Commander is Dep Inspector James Luongo of NYPD. According to DOS, this location is not habitable. DEC landfill experts are concerned about human impacts from landfill gases (CO<sub>2</sub>, H<sub>2</sub>S, methane, etc.), slope stability, capping, etc. Unfortunately, the site is occupied by as many as 900 law enforcement officers and contractor personnel on a 24 hour a day basis. Evidence gathering at this location is a monumental task with no foreseeable end. In addition (although I have zero expertise in this issue) the emotional impact of this operation on the participants could be significant. The costs of this operation appear to outweigh the benefits.

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### **WTC site control**

The major issues related to site control at ground zero are worker enforcement and site security.

*Worker enforcement:* Bechtel is the site safety contractor for the Department of Design and Construction. Bechtel has drafted a site health and safety plan and has had teams of up to twelve (12) site safety experts on the ground since September 25<sup>th</sup>. Since that time, worker compliance with health and safety protocols (wearing of personal protective equipment, or PPE, worker washdown, etc.) has increased, but remains inadequate. Bechtel is responsible for health and safety issues at the WTC site, but in reality has jurisdiction only over DDC contractor (i.e., Turner Construction, Tully, Bovis and Amec and their subcontractors.) Bechtel has no authority over FDNY, NYPD, civilian visitors or outside contractor personnel. An EPA letter (Bruce Sprague to Kelly McKinney, dated Oct 5 01) indicates that responders are not complying with H&S protocols on the ground. I want to explore for site inspections by DOH personnel who could issue NOVs for non-compliance. Since NYC Health Code does not address this issue, can we issue Commissioners Orders?

*Site Security:* Visitor's (family members of missing persons, VIPs, tourists, etc.) continue to access the red zone and ground zero and place themselves in harms way. Several groups (e.g., FDNY, NYPD, Mayor's Office of Community Relations, etc.) have been contacted by DOH and asked to require PPE use to visitors and to restrict routes. These directives have been ignored to date. Port Authority construction unit (SEMAC) has built a viewing stand on the SW corner of Liberty and West Street but it is not being utilized and civilians continue to walk beneath damaged buildings with falling glass and debris, and on roads and access pathways with heavy equipment. On October 5<sup>th</sup>, a large piece of concrete fell from a rooftop in the World Financial Center and landed within 15 feet of an unprotected visitor. The risk of serious injury or death to civilians is high. NYPD is responsible for site security (access at perimeter and movement within red zone) and continues to fail to prevent unauthorized access to, and free movement within, the red zone.

Site control has been further compromised by the withdrawal of NYS Department of Environmental Conservation police, or ENCON. From the first day of this crisis, Captain Terry Ravello and the ENCON force took the lead in enforcing site safety and health and environmental compliance issues. ENCON played a key role in establishing vehicle washdown and construction site safety controls at the site. The absence of ENCON at ground zero and Staten Island landfill will significantly compromise our efforts to increase the safety and security of these sites.

### **Reoccupancy.**

The Mayor's Office is under pressure from building owners and business owners in the red zone to open more of the city to occupancy. According to OEM, some city blocks north and south of ground zero are suitable for reoccupancy. DEP believes the air quality at those locations is not yet suitable for reoccupancy. In an October 5<sup>th</sup> Meeting, DEP Commissioner Miele indicated that, although data shows two consecutive days of fiber counts below the DEP level of concern (0.01 fibers/ cubic centimeter of air) in the target areas, extenuating circumstances (e.g., truck routes, existing debris pile at ground zero, etc.) make DEP "uncomfortable" with opening the target areas. Miele indicated that the final decision about opening rested with DOH. Following the meeting, I was told that the Mayor's Office was directing OEM to open the target areas next week. OEM apparently want to force DEP and DOH to define opening criteria in any objection that they may have to next weeks opening of target areas.

### **Environmental Assessment**

Many agencies (and private groups) are conducting air (and other environmental) sampling in, and around, the red zone. A groups of agencies, led by Jessica Leighton and cited the Environmental Sampling and Assessment Workgroup (ESAW) is charged with disseminating all data and coordinating the environmental

assessment effort. Since the first week of the crisis, EPA has been charged with leading the air quality sampling effort. It is collecting data at 16 stationary stations throughout lower Manhattan. In addition, it is gathering and interpreting data collected from all agencies in the ESAW and communicating results to the public. EPA has been very slow to make data results available and to date has not sufficiently informed the public of air quality issues arising from this disaster. Recently, an occupational exposure specialist from US PHS in Denver CO expressed in the 6pm Environmental Meeting at Pier 92 that the EPA air quality assessment was "inadequate." He indicated that the number of samples collected, the types of analysis performed, and the quality control procedures followed were resulting in an insufficient characterization of the air quality impacts arising from this disaster. A recent Newsweek article on called "Is GroundZero Safe" addresses this issue. It indicates that very small fibers (those less than .5 microns in length) are not found in the EPA analysis and that the levels of asbestos in the outdoor and indoor air are higher than previously reported. In addition, a recent USGS study indicates elevated levels of metalloids (bioavailable heavy metals) and a high dust pH. The PHS representative transmitted a Sampling and Quality Assurance Plan along with SOPs (to arrive Monday morning) which I will review and transmit to EPA for review and implementation.

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Please contact me with questions or comments.