



NEW YORK COMMITTEE FOR OCCUPATIONAL SAFETY AND HEALTH

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Testimony for

New York City Council
Committee on Lower Manhattan Redevelopment

February 27, 2006

***Re: Oversight -
EPA'S Cleanup of WTC Dust Contaminants
in Residences and Offices in Lower Manhattan
Four Years Later - Status of Progress***

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**New York Committee for
Occupational Safety and Health
(NYCOSH)**

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My name is David Newman. I am an industrial hygienist with NYCOSH - the New York Committee for Occupational Safety and Health. I was privileged to serve on the EPA WTC Expert Technical Review Panel from its inception in March 2004 to its premature termination in December 2005. Thank you for holding this hearing.

I served, as did all panelists, with the hope of working closely with EPA on 3 primary goals:

- first, to design an environmental sampling program to find and evaluate remaining 9/11 contaminants, if any, in indoor spaces
- second, to put in place an environmental cleanup program for indoor spaces, where warranted, and
- third, to address unmet public health needs stemming from the events of 9/11.

Unfortunately, EPA terminated the panel process before we could complete our work.

I want to emphasize to the members of the City Council that the "test and clean" program currently being put forth by EPA has not been discussed or approved by the panel. It is EPA's plan - it is not the panel's plan.

The sampling plan is, in my opinion, technically and scientifically flawed. It cannot and it will not adequately identify or clean up 9/11 contaminants if and where they exist.

In fact, the plan does not address remediation in any way.

The EPA plan relies on improper methods for collection of samples. It ignores "reservoirs" of contamination. It excludes sampling results for contaminants found in mechanical ventilation systems.

As a consequence, the plan is likely to under-report any remaining 9/11 contamination. The result for residents may be false assurances of safety. The results for scientists may be skewed data on the extent of geographic dispersion of 9/11 contaminants.

EPA's sampling plan diverges in many significant respects from established regulatory and best work practices in industrial hygiene and environmental remediation.

To take just one example, the plan establishes different "trigger levels" for cleanup of asbestos in different parts of residences. It permits higher levels of contamination to remain, for example, behind refrigerators or on top of bookcases. By contrast, city and state asbestos regulations explicitly and appropriately require that all areas of a contaminated space be cleaned to a single protective standard.

The plan's emphasis on cleaning individual apartments rather than on engaging in systematic whole building cleanup is misplaced. The plan specifically excludes so many types of indoor spaces that its ability to adequately remediate individual residences and to avoid recontamination is seriously compromised. Spaces that are excluded from sampling for the purpose of assessing whether remediation is warranted include mechanical ventilation systems, all commercial spaces, all government and public buildings, and all buildings slated for demolition. Geographic areas that are excluded, but which were potentially impacted, include Brooklyn and much of Chinatown.

I believe the shortcomings of this plan are so significant that its implementation as is would provide little or no public health or scientific benefit. This is unfortunate, as four and a half years after 9/11, EPA has yet to design or implement a systematic, comprehensive testing program. Therefore, even at this late date, we still do not have a good understanding of the nature and extent of contamination associated with those events. EPA has characterized every major chemical or hazardous waste release in the country over the last 20 years, except for Lower Manhattan (and the Gulf Coast). As a result, the available data is still not adequate to permit us to draw any scientifically valid conclusion of safety or risk in Lower Manhattan.

I would like to comment in some detail on two sampling issues - the exclusion of employees and employers from the EPA "test and clean" program and EPA's effort to develop a WTC dust signature.

The issue of EPA's exclusion of workplaces from its test and clean program has not received adequate scrutiny. EPA proposes to address residential spaces only, while at the same time implying that OSHA and NIOSH are available upon request to provide adequate testing and cleaning of places of employment.¹

EPA has not supported its proposal with any scientific argument or data to indicate that workplaces were impacted differently or less severely than residences. I believe no such data exist and no such assertion could be plausibly made.

Nor has EPA presented any data that indicate that in the period from September 11, 2001 to the present day, a significant number (or any number) of workplaces benefitted from

¹ United States Environmental Protection Agency. World Trade Center Indoor Dust Test and Clean Program Plan. pages 20-21, www.epa.gov/wtc/panel/pdfs/final_test_and_clean_program_plan.pdf.

employer-conducted and -financed cleanup efforts, or that these efforts were effective.

Lacking such data, EPA is unable to offer any scientific evidence that its revised proposal to shift responsibility for sampling and cleanup, as well as to shift responsibility for the cost of sampling and cleanup, from government to employers, will result in workplace cleanup efforts equivalent to what the agency proposes to undertake in residences, or indeed, that it will result in any additional cleanup of workplaces at all.

Comments at the July 12 meeting of the EPA WTC Expert Technical Review Panel by representatives from OSHA and NIOSH made clear that while these agencies, as always, will be responsive to queries from workers, unions, and employers, neither agency will be able to provide technical assistance to numbers of workplaces comparable to the number of residential spaces proposed for sampling and cleaning by EPA.

(In its previous “test or clean” program, EPA cleaned or tested 4,167 of an estimated 23,000 eligible residences. There are an estimated 1,500 commercial and institutional buildings in Lower Manhattan, most housing multiple industrial spaces, offices, schools, fire houses, and government operations. According to the comments of the NIOSH representative at the July 12 panel meeting, NIOSH nationally conducts at most several hundred Health Hazard Evaluations [HHEs] each year and does not anticipate any increases in funding to allow it to conduct additional HHEs beyond that number. OSHA last year conducted 5,519 workplace inspections in all of New York State, in the over 500,000 workplaces statewide.^{2,3})

Neither OSHA nor NIOSH engages in or funds remediation of workplace contaminants. OSHA, if it finds violations of OSHA standards, may require employers to engage in cleanup or in other protective measures short of cleanup, at employer rather than government expense. NIOSH may recommend but cannot require remediation, nor can it provide funding for remediation.

OSHA standards are primarily based on inhalation risk and are less protective than EPA standards in general and than EPA cleanup benchmarks under this proposal in particular. Further, there is no correlation between OSHA standards for contaminants in air and EPA benchmarks for contaminants in dust. In addition, OSHA does not have standards for all four COPCs⁴ that the EPA plan proposes to address. As a result, it is possible or even likely that indoor environmental conditions in downtown workplaces that exceed EPA benchmarks for settled dust may not be in violation of OSHA Permissible Exposure Limits (PELs), or that there may be no applicable OSHA standards. In such situations, OSHA

² AFL-CIO. Death on the Job: The Toll of Neglect - A National and State-by-State Profile of Worker Safety and Health in the United States, 14th Edition. Washington, D.C., April 2005, page 101, www.aflcio.org/yourjobeconomy/safety/memorial/upload/death_on_the_job_2005.pdf.

³ The number of workplaces actually inspected may be significantly lower than the number of inspections because numerous workplaces may have been inspected more than once.

⁴ “Contaminants of Potential Concern”

could not compel remediation. In prior versions of the sampling plan, EPA proposed to offer cleaning to workplaces that exceed benchmarks for contaminants in dust. The current version of the plan withdraws that coverage.

It is clear that the practical result of the current EPA proposal, which shifts the technical and financial burden of sampling and cleanup to employers, will be that few or no workplaces will be sampled or cleaned. Stated differently, contamination that would trigger cleanup in residences will be allowed to remain in places of business.

In addition, the opportunity to obtain environmental sampling data from dust in workplaces, and thus to more fully characterize the nature and extent of remaining 9/11 contaminants, if any, will have been lost.

With regard to the issue of the signature, EPA proposed to establish a WTC signature based primarily on slag wool. Had a signature been validated, its presence would then have served as an indicator that a sampled space had been impacted by the collapse of the towers on 9/11. COPCs that are also found to be present would be presumed to be WTC-derived. Absence of the signature components would serve as an indicator that a sampled space had not been impacted. COPCs found to be present would then be presumed to not be of WTC derivation and would be left in place.

However, after a limited independent peer review panel strongly criticized EPA's signature efforts, EPA abandoned both the signature effort and the sampling plan associated with it, reverting instead to its current test and clean program. It is possible, however, that EPA may still attempt to link its discredited signature proposal to the test and clean program that is about to be rolled out, without subjecting it to the scrutiny of the WTC panel, which it has disbanded, or to a public process. For that reason, it is appropriate to revisit the signature issue.

The ability to distinguish with confidence WTC-derived substances would add greatly to our scientific understanding of the environmental consequences of the events of 9/11. Research that validates a WTC signature could also provide the framework for validation of other signatures in the event of future natural or technological disasters and could provide the basis for more rapid, targeted, and effective response efforts.

However, it is one thing to continue to pursue scientific research on the validity of one or more proposed signature substances. It is quite another, at this point in time, to attempt to utilize an unvalidated signature as a means to exclude contaminated indoor spaces from cleanup by EPA .

EPA's signature effort, in my view, is based upon a number of key assumptions. It is assumed that signature substances:

- were dispersed to every geographic area that was impacted by the collapse of the towers and entered every indoor space that was impacted by the collapse of

the towers, and

- were dispersed to every geographic area that was impacted by the activities, routes, and locations of debris removal and waste transfer operations and entered every indoor space that was impacted by the activities, routes, and locations of debris removal and waste transfer operations, and
- were dispersed to every geographic area that was impacted by combustion byproducts in the plume that emanated from Ground Zero fires and entered every indoor space that was impacted by combustion byproducts, and
- have not become separated from other WTC substances, including COPCs, by transport or by activities that resulted in disturbance, and
- have not become separated from other WTC substances, including COPCs, over time.

I believe that for a signature to be validated, these assumptions must also be proved to be valid. EPA has not proved any of these assumptions, nor does it propose to do so.

These assumptions are not likely to be true.

Differences in ratios of surface area to mass may have resulted in particle size segregation of contaminants by distance and elevation. Larger, heavier particles such as slag wool typically would not be expected to travel as far as lighter particulates such as chrysotile, thus reducing the potential utility of slag wool as a WTC signature beyond a limited geographic area.

Slag wool fibers may be less prone to resuspension than are COPCs such as chrysotile asbestos. Consequently, it is possible that over time slag wool fibers that settled out on indoor surfaces may have been more likely to have been removed through normal cleaning activities than other COPCs which may have been resuspended rather than removed. It is therefore possible that WTC-slag wool is now absent in some WTC-impacted indoor spaces while COPCs may remain. Were such a scenario to occur, a signature-reliant sampling plan would improperly exclude these COPCs from identification as WTC-derived, and therefore exclude them from cleanup.

Therefore I believe that sampling for the presence of a signature, if such sampling is to be conducted, should be “unhinged” from sampling for the presence of COPCs. COPC exceedences should be considered presumptive evidence of WTC impact and, barring indication that contaminants originate from other sources, should trigger appropriate substance-specific remediation.

In conclusion, EPA’s sampling proposal was not supported by the panel charged with discussing it. EPA’s signature proposal was not supported by the peer review panel that

assessed it. The current sampling plan is fundamentally flawed and cannot be fixed by tinkering around the edges. Elected officials such as yourselves should let EPA know that this plan is unacceptable to those who live and work in New York City.

Thank you for this opportunity to speak with you today.