



ENVIRONMENTAL TOXICOLOGY LABORATORY, LLC

Testimony to the EPA Expert Panel on WTC Contamination

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<http://www.envirolab.com>

An Open Letter to Dr. Nancy Adams

(Director of EPA Homeland Security, Consequences and Decontamination Division)

Dear Dr. Adams,

Firstly, I should like to thank you for providing Environmental Toxicology Laboratory with dust samples taken from the 5th, 7th, 22nd, and 41st floors of the Deutsche Bank located on 130 Liberty Street. The results of the toxicity tests using the protist organisms, *Glaucoma chattoni* and *Tetramitus rostratus* are presented in ETL's February 23, 2005 Report to the EPA:

"Toxicity of Deutsche Bank Dust Samples" (<http://www.envirolab.com>).

Copies of the report (short version) also were distributed to members of the EPA's Expert Panel on WTC Contamination. At this point in time, ETL has not received any comments in response to the issues raised nor in response to the recommended research proposals directed towards a better understanding of the toxicity data provided in the report. Let me restate the main issues presented in the report:

- Assessment of *Tetramitus* Toxicity provides data on the **synergistic effect** of an organism exposed to the **mixture of pollutants**.
- Assessment of *Tetramitus* Toxicity provides data on **whole particles**, including those limited to the 2 – 5 μm size range.
- The growth inhibition of *Tetramitus* suggests that **DNA damage** may be the mechanism which causes this toxicity. DNA damage in humans exposed to WTC contaminants would produce long-term health effects.
- The swimming behavior response, of *Glaucoma* ciliates, exposed to Deutsche Bank particles, provides a real time **biomonitoring assay**, which produces a toxicity signal within **10 minutes** after initial exposure.
- Validation of the *Glaucoma* Swimming Behavior Assay for the **Assessment of Worker Exposure** would provide a valuable tool for the upcoming Deutsche Bank deconstruction activities.

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It is unfortunate that the EPA cannot provide funds for continuation of ETL's toxicity studies. Continuation of this research is important for a better understanding of the complex issues involving exposure to WTC contaminants. More importantly, these assays need to be validated in order to utilize these toxicity tests for **real-time monitoring of future terrorist attacks.**

Respectfully submitted,

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Director
Environmental Toxicology Laboratory

Cc.

Dr. Jacky Rosati, EPA, Department of Homeland Security
U.S. Congresswoman Carolyn Maloney
U.S. Congressman Jerold Nadler
U.S. Senator Hillary Rodham Clinton
U.S. Senator Joseph I. Lieberman
N.Y. Governor George Pataki
N.Y.C. Mayor Michael Bloomberg
Dr. Chandler Fulton, Professor of Biology, Brandeis University
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