



FACT SHEET: RELEASE OF REPORTS RELATED TO THE WORLD TRADE CENTER DISASTER

Exposure and Human Health Evaluation of Airborne Pollution from the World Trade Center Disaster (DRAFT)

Toxicological Effects of Fine Particulate Matter Derived from the Destruction of the World Trade Center (FINAL)

ACTIONS:

The U.S. Environmental Protection Agency (EPA) has completed a draft report entitled, “Exposure and Human Health Evaluation of Airborne Pollution from the World Trade Center Disaster,” and is soliciting comments from the public on this draft report during a 60-day comment period. In addition, the EPA has completed a final report, entitled “Toxicological Effects of Fine Particulate Matter Derived from the Destruction of the World Trade Center.” Both of these documents are available to the public. A *Federal Register* notice, published December 27, 2002, announced: 1) the public availability of the external review draft and the start of the comment period; and 2) the availability of the final rodent respiratory studies report.

SUMMARY:

EPA has released for public review and comment a draft evaluation of exposure and human health impacts of the September 11, 2001, terrorist attack on the World Trade Center (WTC). The draft evaluation concludes that, with the exception of those exposed immediately following the collapse and perhaps during the next few days, people in the surrounding community are not likely to suffer from serious long or short term health effects. The draft report evaluates the measured outdoor levels of various air pollutants to which the public had been potentially exposed as a result of the collapse of the WTC. These data were evaluated in terms of available health benchmark concentrations and typical background concentrations for New York City or other urban areas. The draft report focuses on: particulate matter (PM), metals (lead, chromium and nickel compounds), polychlorinated biphenyls, dioxin-like compounds, asbestos, and volatile organic compounds.

The draft report includes a discussion of rodent respiratory toxicology studies, conducted by EPA scientists, that found that high doses of WTC dust could cause mild respiratory effects in mice. These studies exposed mice to fallen dust samples collected at or near the WTC site on September 12 and 13, 2001. The report, “Toxicological Effects of Fine Particulate Matter Derived from the Destruction of the World Trade Center,” summarizes these studies. The purpose of these studies was to evaluate the toxicity of fine PM on the respiratory tract of mice and to compare well-studied PM reference samples, ranging from essentially inert to quite toxic, to those collected at the WTC site. These studies found that fine particles were mostly dominated by calcium containing compounds derived from WTC building materials and that a high dose of WTC fine PM could cause mild lung inflammation and air flow obstruction in mice. These findings suggest that a similarly high dose in people could cause short-term respiratory effects such as inflammation and cough. These studies have been accepted for publication in the peer-reviewed journal, *Environmental Health Perspectives*, and are expected to be published shortly.

It is important to note that the draft human health evaluation is undergoing public review, as well as external independent expert scientific peer review. These review processes are usual steps that the Agency takes to

insure full and open participation by interested parties. These steps also help the Agency to identify areas where a draft document could be improved to strengthen both clarity and completeness of the draft. Comments from the public and from the expert peer review will be used to improve the draft report before it is finalized.

BACKGROUND:

EPA responded immediately to the September 11, 2001, terrorist attack on the WTC. The Agency, along with many other federal, state and local agencies, was called upon to bring its technical and scientific expertise to the national emergency. EPA, other federal agencies, and New York City and New York State public health and environmental authorities initiated numerous air monitoring activities to better understand the ongoing impact of emissions from that disaster. Many EPA offices and programs quickly became involved with these activities, providing scientific, engineering, public health, and management expertise to help cope with the after effects of the collapse of the WTC. EPA Region 2, which includes the New York City metropolitan area in New York and New Jersey, is the Agency's lead office on these activities, including the important and complicated task of community outreach and communication. As part of these activities, Region 2 requested that ORD conduct a human health evaluation of exposure to air pollutants resulting from the WTC disaster.

DOCUMENT AVAILABILITY:

Draft Human Health Evaluation: The primary method for document availability will be via the Internet at <http://www.epa.gov/ncea/wtc.htm>. A limited number of CDs and paper copies are available from: Technical Information Staff (8623D), U.S. Environmental Protection Agency, Office of Research and Development, National Center for Environmental Assessment, 1200 Pennsylvania Avenue, NW, Washington, DC 20460; Telephone: 202-564-3261; Facsimile: 202-565-0050; Email: nceadc.comment@epa.gov.

Final Rodent Respiratory Toxicology Report: The primary method for document availability will be via the Internet at <http://www.epa.gov/nheerl>. A limited number of paper copies will be available from EPA's National Service Center for Environmental Publications (NSCEP) in the near future. To obtain copies, please contact NSCEP by telephone (1-800-490-9198 or 513-489-8190), by facsimile (513-489-8695), or by mail (P.O. Box 42419, Cincinnati, OH 45242-0419). Please provide your name and mailing address and the title and EPA number of the document requested (*Toxicological Effects of Fine Particulate Matter Derived from the Destruction of the World Trade Center*. EPA/600/R-02/028, June 2002).

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