ENVIROSCIENCE CONSULTANTS, INC.

2150 SMITHTOWN AVENUE
RONKONKOMA, NEW YORK 11779-7348
PHONE: (631) 580-3191 • FACSIMILE (631) 580-3195

B. GALLAGHER
C. GILBERT, PH.D.
T. KLUENDER
G. NEUSCHWENDER

P. DERMODY
E. DETWEILER
J. DRISCOLL
S. MENECIO
L. SAVARESE

28 September 2001

Mr. Kenneth Coffey, President
TechClean
242-E Route 109
Farmingdale, New York 11735
Phone: 631-454-9595 Facsimile: 631-454-9605

Subject: Air and Bulk Sampling Results for the American Stock Exchange 86 Trinity Place, 22 Thames, and 65 Broadway, New York, NY.

Dear Mr. Coffey:

Air and bulk sampling was conducted September 19th, 20th, 21st, 24th 2001 at the American Stock Exchange, 86 Trinity Place, 22 Thames, and 65 Broadway, New York, NY following the explosion, fire and collapse of the World Trade Center and adjacent buildings. It was decided to collect samples of the following compounds based on an evaluation of the conditions due to the explosion, fire and collapse of the World Trade Center. The substances collected included the following: asbestos (air and bulk), respirable dust (mass & particle size distribution), lead, polychlorinatedbiphenyls, polynuclear aromatic hydrocarbons. The substances, sampling protocol, and standards employed were discussed with Dr. Mark Maddoloni the Toxicologist assigned to the World Trade Center site by US EPA. The air and bulk sampling locations and results are reported below. Asbestos samples were collected according to New York State and U.S. EPA standards and analyzed according to and analyzed U.S. EPA standards using Transmission Electron Microscopy. Other substances were collected and analyzed using the National Institutes for Occupational Safety and Health protocol.

Based on our experience and direction from U.S. EPA and the New York State Department of Labor we recommend that those samples that met the U.S. EPA AHERA clearance criteria of 70 structures/square millimeter are considered acceptable and are considered safe for reoccupancy. However, a U.S. Occupational Safety and Health Administration officer informed legal counsel for the American Stock Exchange that the Permissible Exposure Limit (PEL) should be applied here. It was requested that the results determined using the U.S. AHERA regulations be converted to OSHA style results. The U.S. AHERA regulations were developed to protect all children, faculty, and staff in schools from asbestos exposure. The two different methodologies, U.S. EPA AHERA methodology, and OSHA used methodology differ from the beginning of the protocol. The U.S. EPA uses 70 structures per square millimeter (s/mm^2) as the value considered safe for school reoccupancy by children, faculty, and staff after asbestos abaement. The AHERA protocol uses an electron microscope with a magnification of up to 200,000 times. The NIOSH method may use a phase contrast light microscope with a magnification of up to 400 times or an electron microscope. AHERA allows a blank filter to have up to 70 structures per square millimeter. Structures are fibers, clusters, bundles, and matrixes that contain asbestos fibers greater than 0.5 micrometers in length. If the average work area samples are found to have less than the 70 s/mm^2 no further action is required. If the samples are found to be greater than 70 s/mm^2 then the asbestos air concentration outside the work area is compared with the work area air concentration and subjected to a Z-Test statistical technique or the work area may be re-cleaned and the air re-sampled. The filter concentration is multiplied by the filter area and divided by the air volume sampled (in cubic

centimeters) to produce the asbestos air concentration. The NIOSH 7400 or 7402 methods used by OSHA to evaluate worker exposure results in values of fibers per cubic centimeter. Fibers greater than 5 micrometers in length and greater than 0.25 micrometers in diameter are counted. Structures counted in AHERA include the fibers in the NIOSH OSHA approach and includes much smaller structures. So the AHERA air concentration presented in the attached tables are more protective than the NIOSH OSHA approach

Samples that met the U.S. EPA AHERA clearance criteria of 70 structures/square millimeter are considered acceptable and are considered safe for reoccupancy.

The 9th floor has three samples (Room, 909, Cubical 49, and Cassaleggi room) that exceed the U.S. EPA AHERA clearance criteria of 70 structures/square millimeter and one that approaches the clearance criteria (Cubical 52). Cubical 39 has a value of 37.88. These results are less than the OSHA PEL of 0.1 fibers per cubic centimeter.

We believe the asbestos in the air in these areas is due to the catastrophe and we do not believe that the asbestos was from the 22 Thames building because of the residue from the explosions and collapse was found in significant quantities on this floor and because the other results in 22 Thames and 86 Trinity Place are so low. Other floors such as the 6th floor also had significant quantities of the residue from the explosions and collapse. On September 23, 2001, we recommend that the floors in 22 Thames that had not been tested be tested. This sampling was completed on September 24th 2001.

Outdoors samples were collected on the 4th floor, and the 8th floor. These samples were all less than detectable limits. These outdoor samples may be compared with the U.S. EPA collected asbestos air monitoring locations Lower Manhattan that are presented on *www.epa.gov/epahome/datamap02.htm*.

Asbestos bulk samples were collected on September 20th and September 24th. Dust samples were collected from exterior window ledges and different sites where material was available inside the building. All samples collected are not considered asbestos containing material since they contain less than one percent asbestos. The Asbestos bulk sample results are presented in the attached tables.

The asbestos clean up must be conducted by New York State and U.S. EPA certified asbestos abatement contractors and workers. The general cleaning protocol once gross debris has been removed is to HEPA vacuum, followed by an amended water wash, followed by HEPA vacuuming. Porous surfaces such as carpets, furniture, ceiling tiles (and support grids), office partitions, and other soft goods must be evaluated for the feasibility of cleaning. If surfaces can not be cleaned they must be discarded. The electrical equipment must be evaluated and specially cleaned or discarded.

The asbestos cleaning started with the floors most needed by the American Stock Exchange and proceeded to other floors on a priority basis. Asbestos fibers from outside the building and from the 9th floor of 22 Thames have not appeared to migrate to the other floors because the samples collected on later days show virtually all zero counts for structures per millimeter squared or structures per centimeter squared.

The lead in air samples were collected from areas considered representative of the building. Only one sample was collected from each area to accelerate the building screening process. The lead in air results are presented in the table below.