

**TRC**  
*Customer-Focused Solutions*

**Lower Manhattan Development Corporation  
130 Liberty Street Deconstruction Project  
Exceedance Report  
October 6, 2005**

**Date of Exceedance: Wednesday, September 28, 2005**

<b>Analyte</b>	<b>Asbestos (AHERA)</b>	<b>Silica</b>
<b>Location</b>	Station 8, northeast area, roof level	Station 7, southeast area, roof level
<b>Concentration</b>	96 s/mm <sup>2</sup>	10.1 ug/m <sup>3</sup>
<b>USEPA Site-Specific Trigger Level</b>	70 s/mm <sup>2</sup>	10 ug/m <sup>3</sup>
<b>Target Air Quality Level:</b>	N/A	10 ug/m <sup>3</sup>

**Summary of Event:**

An exceedance of the USEPA Site-Specific Trigger Level of Asbestos (AHERA) and Silica occurred on the roof level at 130 Liberty Street (Building) for air samples collected on September 28, 2005. The samples were sent to and received by EMSL Analytical Inc. laboratory (NYSDOH ELAP #10872) on September 29, 2005. On September 30, 2005, the Asbestos (AHERA) sample was analyzed following TEM Method EPA 40 CFR Part 763 and the results reported. On October 4, 2005, the silica sample was analyzed following NIOSH Method 7500 XRD and the results reported. The laboratory reports are included in the attached Supporting Data.

Activities at 130 Liberty Street on this date included completion of the roof abatement. Work occurred from 8:00 AM through 5:00 PM. The work included final cleaning and gravel removal, vacuuming and wet-wiping all roof surfaces including, but not limited to, vents, mechanical surfaces, bulk heads, roof floor, and parapet wall. Cleaning and abating the masonry parapet wall adjacent to the air monitoring station could potentially have impacted the silica sample, contributing to the silica exceedance, since silica sand is a component of the brick mortar and was observed on the parapet wall.

According to the Visual Inspection Report, attached in the Supporting Data, no visual emissions were observed in the roof vicinity. Photographs taken on September 28, 2005 of roof activities were taken and are also included in the Supporting Data.

The wind rose, included in the attached Supporting Data, from the meteorological station located on the roof indicates a predominant south-south-east wind direction. The Asbestos (AHERA) and silica results of stations located on the roof and their locations respective to the wind direction are summarized below.

Date: October 6, 2005

**TRC**  
**Customer-Focused Solutions**

Roof Station	Location relative to roof work	Asbestos (AHERA) result (s/mm <sup>2</sup> )	Silica result (ug/m <sup>3</sup> )
Station 6	Upwind	<19	5
Station 7	Upwind	<19	10.1
Station 8	Upwind	96	<2
Station 9	Downwind	19	<2

**Corrective Action:**

As a result of the roof abatement completion, samples were not collected on September 29, 2005 at air monitoring Stations 6, 7, 8, or 9. However, per ICR 56, the roof area was re-cleaned utilizing additional supplemental wet-methods and Asbestos (AHERA) air monitoring reinstated on the roof for September 30, 2005 in order to confirm that concentrations were below the USEPA Site-Specific Trigger Level for Asbestos. Five samples were collected, one on each roof corner and one in the roof center and analyzed for TEM EPA 40 CFR Part 763. No asbestos was detected in the five samples (<15 s/mm<sup>2</sup>). These results are attached in the Supporting Data. Going forward, TRC will continue to closely monitor the use of dust control practices including frequently wetting surfaces containing dust/sand with amended water during the work.

**Supporting Data attached:**

1. Analytical Data summary – Asbestos (AHERA) and silica analytical results for all stations on the date of the exceedance and the additional Asbestos (AHERA) sampling which occurred on September 30, 2005.
2. Particulate Data – Plot of PM<sub>2.5</sub> and PM<sub>10</sub> concentrations (10-minute averages) versus time for the station where the exceedance occurred.
3. Meteorological Data – wind rose plots for the sample collection period of interest
4. Visual Inspection Reports – visible dust emission monitoring summaries from the 130 Liberty Street project.
5. Photographs of activities at and near the station where the exceedance occurred