



June 18, 2019

HRP Management LLC
2 Ridgedale Avenue, Suite 370
Cedar Knolls, NJ 07927
Attn: Mr. Lewis D. Ronca

Re: **Industrial Hygiene Services**
Martin Tower
Bethlehem, PA
VERTEX Project No. 57190

Dear Mr. Ronca:

In May 2019, The Vertex Companies, Inc (VERTEX) was retained by HRP Management LLC to provide industrial hygiene services associated with the implosion of Martin Tower located at 1170 8th Avenue in Bethlehem, Pennsylvania (the site). Specifically, services included perimeter air quality sampling from locations surrounding the implosion site for the following parameters: asbestos, lead, and particulate matter (PM).

Air sampling was requested to be performed prior to, during the day of, and post the implosion event. The implosion of Martin Tower was scheduled for May 19, 2019 at 7:00 AM. General sampling locations were chosen based on concerns expressed by nearby properties and the presumed prevailing winds. A total of four sampling locations were proposed. Baseline air sampling was performed on May 16, 2019 during the course of one work shift and included four monitoring stations for PM, and three air sampling locations for asbestos and lead. During air sampling was performed on May 19, 2019 for an approximate 24-hour period for PM and asbestos and lead sampling during the course of one shift. Post air sampling was performed on May 21, 2019 during the course of one work shift and included four monitoring stations for PM.

Baseline:

- No detectable concentrations of asbestos were identified in each of the three air samples collected.
- No detectable concentrations of lead were identified in each of the three air samples collected.
- PM concentrations for the four monitoring stations revealed the following ranges: average concentrations from 3.7 to 5.0 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$); maximum concentrations from 7.6 to 59.4 $\mu\text{g}/\text{m}^3$; and average diameter from 0.37 micro meter (μm) to 0.41 μm .

During:

- The implosion occurred at approximately 7:04 AM. No significant wind was detected at that time. Visual observations of the implosion dust cloud appeared to trend westward, northward and northeastward.
- The sampling equipment at the northeast monitoring station (near the Eaton Ave / Schoenersville Road egress) was coated with dust following the implosion.
- No detectable concentrations of asbestos were identified in two of the four air samples collected. The remaining two air samples (A-4 & A-7) could not be analyzed due to overloading of particulate.
- No detectable concentrations of lead were identified in each of the four air samples collected.
- PM concentrations for the four monitoring stations revealed the following ranges: average concentrations from 8.3 to 184.4 $\mu\text{g}/\text{m}^3$; maximum concentrations from 9.3 to 33,625 $\mu\text{g}/\text{m}^3$; and average diameter from 0.31 μm to 0.91 μm . Data indicates a significant spike of PM for less than a half hour after the implosion, subsequently, the PM concentrations generally went back to normal or slightly above normal readings.

Post:

- PM concentrations for the four monitoring stations revealed the following ranges: average concentrations from 0.9 to 19.3 $\mu\text{g}/\text{m}^3$; maximum concentrations from 2.1 to 95.6 $\mu\text{g}/\text{m}^3$; and average diameter from 0.37 μm to 4.12 μm .

Air samples for asbestos were collected in accordance with NIOSH method 7402 Asbestos by TEM. Samples were submitted to an AIHA accredited laboratory, EMSL Analytical, Inc. of Cinnaminson, New Jersey; AIHA ELPAT (Lab ID: 100194). Samples were submitted for TEM Asbestos analysis via AHERA (40 CFR Part 763 Appendix A subpart E).

Air samples for lead content were collected on 0.8-micron pore size, 37 mm mixed cellulose ester filter/support pad cassettes. Analysis was performed by EMSL Analytical, Inc. of Cinnaminson, New Jersey per National Institute of Occupational Safety and Health (NIOSH) Method 7082 Lead in Air by Flame Atomic-Absorption Spectroscopy (AAS).

PM monitoring was performed utilizing DataRAM 4 (Model DR-4000) units providing continuous monitoring with real-time concentrations.

Conclusion:

Air sampling results revealed no detectable concentrations of asbestos or lead. However, two air samples for asbestos content could not be analyzed due to overloading of particulate. PM monitoring revealed no remarkable concentrations in three of the sampling locations. The PM monitoring station positioned northeast of the building within the fence line near the Eaton Ave / Schoenersville Road egress was visibly coated with debris following the implosion. Data from this northeast sampling station indicates a significant spike of PM for less than a half hour after the implosion, subsequently, the PM concentrations generally went back to normal or slightly above normal readings.

If you should have any questions or require further information, please do not hesitate to contact me.

Sincerely,
The Vertex Companies, Inc.



William Otten
Division Manager

Attachments: Air Sample Location Map
Laboratory Results
Particulate Matter Data

Post

Demolition Exclusion Zone



Martin Tower



Exclusion Zone

Exclusion Zone: General Public WILL NOT be permitted



Lowes



Recycling Center



Lehigh County Command Post



Northampton County Command Post



Burnside

