

Materials & Methods

I) Bulk Samples

Where possible, grab samples of settled dust were collected and deposited in plastic bags. In the absence of grab samples, alcohol soaked wipes were used to gather dust. Locations of samples are identified in the attached Chain of Custody. Samples were analyzed at EMSL Analytical, Inc. located at 3 Cooper Street, Westmont NJ 08108 (EMSL). Analytical results are presented in attached charts:

Chart A: 47 Ann Street

B: 80 John Street

C: 105 Duane Street, Apt. 12L

D: 67 Liberty Street, Apt. 6

II) Mercury Vapor Monitoring

A Jerome mercury vapor monitor (manufactured by Arizona Instruments) was used to monitor airborne mercury vapor concentrations. This instrument is a direct readout type and is widely used in the environmental industry. The detection range for this instrument is 0.003 mg/m^3 to 0.999 mg/m^3 of Hg with a sensitivity of 0.003 mg/m^3 . The unit used for this study was rented from Ashtead Technologies (formerly Response Rentals). Calibration data is attached.

III) Vapor Sampling Locations

Mercury vapor concentrations were measured at several locations. Data obtained at each location is presented in a tabular form.

Table A: 47 Ann Street (Several residential units)

Table B & C: 80 John Street (Apt. 2H)

Table D: 67 Liberty Street (Apt. 6)

Table E: Broadway, Church Street, Murray Street, Canal Street, and Chamber Street.

Table F: From 31st Street on 3rd Avenue to 31st Street and 5th Avenue, south to 23rd Street and 5th Avenue, east to Lexington Avenue and back up to 31st Street.

Table G & H: A control location was used in Montclair, NJ at 251 Park Street. Measurements were also made in New Jersey outside a hardware store where broken fluorescent bulbs had been discarded.

Vapor measurements in apartments were made at several heights, i.e. at the floor level, 2 feet above the floor, in the breathing zone, and close to the ceiling. Mercury vapor data is presented in the attached tables.