NYC 9/11 Public Portal Document

Isocyanates

U.S. Environmental Protection Agency (*www.epa.gov*)
Sampling Situation Report
Tuesday, January 29, 2002

Fixed Ambient Air Sampling Locations (Asbestos)

- NYC / ER (Jan 24, 0001 - 1200 hrs)
  - Errata: Previously reported in the January 28 Sampling Situation Report that 2 samples were not collected due to equipment malfunctions. There was actually only one malfunction.
- NYC / ER (Jan 24, 1200 - 2359 hrs)
  - All 22 samples analyzed were below the TEM AHERA standard.
- NYC / ER (Jan 25, 0001 - 1200 hrs)
  - All 21 samples analyzed were below the TEM AHERA standard.
  - 1 sample (Location N) was not collected due to an equipment malfunction.
- NYC / ER (Jan 25, 1200 - 2359 hrs)
  - All 21 samples analyzed were below the TEM AHERA standard.
  - 1 location (Location T) was not sampled since access was not available.
- NYC / ER (Jan 26, 0001 - 1200 hrs)
  - All 20 samples analyzed were below the TEM AHERA standard.
  - 1 sample (Location D) was not collected due to an equipment malfunction.
  - 1 location (Location T) was not sampled since access was not available.

Landfill Ambient Air Sampling Locations

- Fresh Kills (Jan 24, 0745 - 2220)
  - All 19 samples analyzed were below the TEM AHERA standard.
- Fresh Kills (Jan 25, 0740 - 2230)
  - All 18 samples analyzed were below the TEM AHERA standard.
  - 1 sample (Location O-17) was not collected due to an equipment malfunction.
  - Note: Low sample volume recorded.

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- Fresh Kills (Jan 28) - Particulate Monitoring (Dataram)
  - No particulate measurements were conducted due to inoperative equipment.

Ambient Air Sampling Locations

- NYC / ER (Dec 19) - Isocyanates
  - **Note**: The January 28 Sampling Situation Report reported confirmatory isocyanate results. Additional information provided below to supplement original report.
  - The levels of MDI (4,4'-Methylenediphenyl Isocyanate) identified at Location R **(0.0093 mg/m^3)** and its duplicate sample **(0.0067 mg/m^3)** were both above the EPA Removal Action guidance level **(0.0062 mg/m^3)** based on noncarcinogenic effects.
  - As reported previously, MDI (4,4'-Methylenediphenyl Isocyanate) was also identified at the Vista Hotel location **(0.014 mg/m^3)**, within the Ground Zero work zone, where the OSHA PEL and NIOSH REL are more applicable.
  - The OSHA PEL for MDI is **0.2 mg/m^3**. The NIOSH REL is **0.05 mg/m^3**.
  - Winds were generally steady out of the west during the limited 15-minute time period the samples were collected.
- NYC / ER (Jan 21) - Particulate Monitoring (TEOM $PM_{2.5}$)
  - Park Row (Site 1) - 24-hr average concentration for this period was ***20.60 ug/m^3***.
  - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***20.29 ug/m^3***.
  - Wall Street - 24-hour average concentrations for this period was ***19.61 ug/m^3***.
  - All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m^3).
- NYC / ER (Jan 21) - Particulate Monitoring (TEOM PM_{10})
  - Wall Street - 24-hour average concentrations for this period was ***26.28 ug/m^3***.
  - All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m^3).
- NYC / ER (Jan 22) - Particulate Monitoring (TEOM $PM_{2.5}$)
  - Park Row (Site 1) - 24-hr average concentration for this period was ***14.82 ug/m^3***.
  - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***12.11 ug/m^3***.

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- Wall Street - 24-hour average concentrations for this period was ***13.34 ug/m³***.
- All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

- NYC / ER (Jan 22) - Particulate Monitoring (TEOM PM_{10})

  - Wall Street - 24-hour average concentrations for this period was ***22.29 ug/m³***.
  - All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

- NYC / ER (Jan 23) - Particulate Monitoring (TEOM $PM_{2.5}$)

  - Park Row (Site 1) - 24-hr average concentration for this period was ***12.82 ug/m³***.
  - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.27 ug/m³***.
  - Wall Street - 24-hour average concentrations for this period was ***12.47 ug/m³***.
  - All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

- NYC / ER (Jan 23) - Particulate Monitoring (TEOM PM_{10})

  - Wall Street - 24-hour average concentrations for this period was ***21.25 ug/m³***.
  - All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

- NYC / ER (Jan 24) - Particulate Monitoring (TEOM $PM_{2.5}$)

  - Park Row (Site 1) - 24-hr average concentration for this period was ***14.33 ug/m³***.
  - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***16.32 ug/m³***.
  - Wall Street - 24-hour average concentrations for this period was ***14.94 ug/m³***.
  - All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

- NYC / ER (Jan 24) - Particulate Monitoring (TEOM PM_{10})

  - Wall Street - 24-hour average concentrations for this period was ***19.82 ug/m³***.
  - All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).

- NYC / ER (Jan 25) - Particulate Monitoring (TEOM $PM_{2.5}$)

  - Park Row (Site 1) - 24-hr average concentration for this period was ***9.80 ug/m³***.
  - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***10.59 ug/m³***.
  - Wall Street - 24-hour average concentrations for this period was ***10.52 ug/m³***.
  - All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).

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- NYC / ER (Jan 25) - Particulate Monitoring (TEOM PM_{10})
  - Wall Street - 24-hour average concentrations for this period was ***21.34 ug/m³***.
  - All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).
- NYC / ER (Jan 26) - Particulate Monitoring (TEOM $PM_{2.5}$)
  - Park Row (Site 1) - 24-hr average concentration for this period was ***11.16 ug/m³***.
  - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was ***11.75 ug/m³***.
  - Wall Street - 24-hour average concentrations for this period was ***10.06 ug/m³***.
  - All readings below the National Ambient Air Quality Standard for $PM_{2.5}$ (65 ug/m³).
- NYC / ER (Jan 26) - Particulate Monitoring (TEOM PM_{10})
  - Wall Street - 24-hour average concentrations for this period was ***19.07 ug/m³***.
  - All readings below the National Ambient Air Quality Standard for PM_{10} (150 ug/m³).
- NYC / ER (Jan 28) - Particulate Monitoring (Dataram)
  - Particulate levels noted at three locations (Stations L, N, and R) were below the OSHA TWA.
  - Instruments operated approximately 6 hours.
  - Station L values ranged from 0.0 to 184.1 ug/m³ with an average of 49.8 ug/m³.
  - Station N values ranged from 0.0 to 131.6 ug/m³ with an average of 37.3 ug/m³.
  - Station R values ranged from 0.0 to 140.3 ug/m³ with an average of 36.9 ug/m³.
- NYC / ER (Jan 28) - Volatile Organics (Mobile Laboratory)
  - Volatile organic compounds were not detected above the detection limit (20 ppbv) in any of the four samples collected (Washing Tent, Austin Tobin Plaza, North Tower, and South Tower), including in the debris area at ground level.

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