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January 29, 2002

Mr. Bernard P. Orlan
Director, Environmental Health & Safety
New York City Board of Education
28-11 Queens Plaza North
Long Island City, NY 11101-4008

**Re: Outdoor Respirable Particulate Air Monitoring
Various Manhattan Locations
ATC Project No. 15-19125-0279**

Dear Mr. Orlan:

ATC Associates Inc. (ATC) is pleased to provide this report of the results of real-time air monitoring of respirable particulates conducted on January 29, 2002, at numerous locations. The New York City Board of Education (BOE) requested this monitoring to obtain comparison data for lower Manhattan schools.

SCOPE OF WORK

Darnell Nehlich, Environmental Technician from ATC's New York City office, conducted the monitoring. ATC's findings are based on real-time environmental measurements. Real-time readings of respirable particulates (PM_{2.5}) were collected only from outdoors.

ATC recorded concentrations of respirable particulates with a Dust Trak® Aerosol Monitor Model 8520, manufactured by TSI, Inc.

The assessment was performed consistent with generally accepted air quality assessment practices. As with all such assessments, there were inherent limitations created by constraints of time, operational and work practice variability, variations in air quality parameters, and sampling and analytical accuracy. The results of the sampling represent conditions found on the date of the survey and may not represent conditions found at other times.

EVALUATION CRITERIA

Table 1 lists the target guideline for the parameter that ATC evaluated during this investigation.

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TABLE 1
TARGET GUIDELINES FOR AIR QUALITY PARAMETERS EVALUATED*

PARAMETER	TARGET LEVEL	AGENCY OR ORGANIZATION
Respirable Particulates (PM _{2.5})	65 micrograms per cubic meter of air (µg/m ³) 24 hour average	USEPA NPAAQS
Respirable Particulates (PM _{2.5})	40 µg/m ³ 24 hour average	USEPA recommendation for children/sensitive individuals

USEPA = United States Environmental Protection Agency
NPAAQS = National Primary Ambient-Air Quality Standard

REAL-TIME SAMPLING RESULTS

A total of thirty-three (33) outdoor respirable particulates measurements* were collected from eight locations in Manhattan, ranging from E. 12th St. to E. 33rd St. The measurements were made from 12:30 P.M. to 3:30 P.M. The IAQ field report forms are provided as the Attachment.

The PM_{2.5} concentrations ranged from 49 µg/m³ to 84 µg/m³. Thirteen readings were above the NPAAQS of 65 µg/m³ and all were above the EPA recommended level for children and sensitive individuals of 40 µg/m³.

- * The measurements made during this assessment were instantaneous readings, the NPAAQS and the recommendation for children are 24-hour averages.

CONCLUSION

Based on our measurements, all of the PM_{2.5} concentrations at the locations assessed exceeded the EPA guideline and 40% exceeded the applicable EPA standard.

It is our pleasure to provide these indoor air consultative services to the New York City Board of Education. If you have any questions about this report, please contact me at (212) 353-8280, extension 261 or 212.

Sincerely,
ATC ASSOCIATES INC.



James R. Cohn, CIH, CSP
Regional Manager, Industrial Hygiene Division

Attachment

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