NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.

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September 20, 2001

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: Respirable Dust Assessment
Murray Bergtraum High School (M520)
411 Pearl Street
New York, New York
ATC Project No. 15-19125-0247

Dear Mr. Orlan:

ATC Associates Inc. (ATC) is pleased to provide this report of a respirable particulate assessment conducted on September 20, 2001, at the referenced school. The New York City Board of Education (BOE) requested this assessment due concerns of dust infiltration from outside the school building.

SCOPE OF WORK

ATC conducted this evaluation to assess the concentration respirable particulates within the building.

Andreas Andreou, Senior Project Manager of ATC's New York City office, conducted the assessment. ATC's findings and conclusions are based on visual observations, the real-time environmental measurements and conditions present in the school at the time of the assessment.

ATC measured concentrations of respirable particulates with a MiniRam Aerosol Monitor Model PDM-3, manufactured by MIE®, Inc.

The assessments were performed consistent with generally accepted indoor 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 contaminant concentrations, and sampling accuracy.

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The results of the sampling represent condition found on the date of the survey and may not represent conditions found at other times. The information presented in this report should be used by the Board of Education as a guide to assess the need for further improvements in current indoor air quality control activities.

EVALUATION CRITERIA

Currently, there are no regulatory standards for indoor air quality in non-industrial buildings, such as offices and schools. For the real-time data collected, ATC uses the commonly accepted guidelines cited in the following publication:

- *Ventilation for Acceptable Indoor Air Quality (ASHRAE 62-1999)*, American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE).

Table 1 lists target guideline for the parameter that ATC evaluated during this investigation. Meeting the listed value does not assure that acceptable indoor air quality will be achieved at all times.

TABLE 1
TARGET GUIDELINE FOR INDOOR AIR QUALITY PARAMETER EVALUATED

PARAMETER	TARGET LEVEL	AGENCY OR ORGANIZATION
Respirable Particles (PM_{10})	50 micrograms per cubic meter of air ($\mu g/m^3$)	USEPA NPAAQS as cited in ASHRAE 62-1999

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

RESULTS

ATC collected one hundred seven (107) measurements of respirable particulates randomly throughout the school. All but three (3) readings were below the ASHRAE 62-1999 guideline of 50 $\mu g/m^3$ (See Attachment 1). Indoor concentrations ranged from 0 to 250 ug/m^3. The outdoor concentration was 0 ug/m^3 due to heavy rain at the time of the assessment. Due to the sensitivity of the instrument used, levels recorded as 0 ug/m^3 represent levels of less than 10ug/m^3. This difference does not affect ATC's conclusions.

OBSERVATIONS

The three areas with high dust readings were on the 6th floor where ATC observed dust on the furniture in the elevator lobby and on the gymnasium floor. Four large floor fans were running in the gymnasium at the time of ATC's assessment. Other areas within the school were clean.

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CONCLUSION

Based on our observations and measurements of respirable particulates, ATC concludes that the assessed locations were suitable for occupancy at the time of ATC's assessment. ATC recommends that the elevator lobby and the gymnasium be cleaned by wet-wiping and moping. The gymnasium fans should be shut off while the area is being cleaned.

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 call (212) 353-8280, extension 261 or 212.

Yours truly,
ATC ASSOCIATES INC.

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

Attachments

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ATTACHMENT 1

IAQ FIELD DATA COLLECTION FORMS

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