NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.

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August 30, 2002

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

Re: Air Samples for Metals
P.S. 89M
ATC Project No. 15-19125-0297

Dear Mr. Orlan:

ATC Associates, Inc. (ATC) is pleased to provide this report of the results of air sampling for metals conducted on August 16, 2002, at the referenced school. The New York City Department of Education (DOE) requested this sampling prior to the resumption of classes to verify that acceptable indoor air quality is being maintained.

Scope of Work

ATC collected four (4) samples for metals for a minimum of ten (10) hours using 37 mm mixed cellulose ester filters connected to battery-powered sampling pumps at a flow rate of 2 liters per minute. Pumps were calibrated before and after each sampling period. One (1) Sample was collected inside the building and three (3) were collected outdoors. Two blank samples were also submitted. The samples were sent to PSC Analytical Services, Inc., an American Industrial Hygiene Association-accredited laboratory in Reading, PA. Analysis was performed by NIOSH Methods 7300M. Each sample was analyzed for a panel of twelve (12) metals. The metals were aluminum (Al), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), iron (Fe), lead (Pb), magnesium (Mg), manganese (Mn), molybdenum (Mo), nickel (Ni) and zinc (Zn). A copy of the analytical report is attached.

Tenzin Namgyal and Wagdi Abdelshahid, Industrial Hygienists from ATC's New York City office, conducted the sampling consistent at accepted industrial hygiene practices. The results represent the conditions on the day the samples were collected.

The sampling locations were the 1st floor Hallway (center), Playground-north, Playground-south and the Roof.

The established regulatory values for metals are intended for industrial workplace exposures and are not generally applicable to office/school settings. *There are no standards for these metals in indoor air in non-industrial situations.*

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Results

None of the metals in the panel were present indoors above the limits of detection.

Chromium (Cr), was detected in the roof sample (M4) at 0.445 micrograms per cubic meter ($\mu g/m^3$) and in one of the blanks at 0.454 micrograms per sample (Blank average = 0.227 micrograms per sample). Blank correcting the Cr concentration lowers it to 0.256 $\mu g/m^3$.

The other metals detected outdoors were Al, Fe, Mg, and Mn. Pb was not detected in any of the samples.

The Environmental Protection Agency (EPA) has set a screening level for hexavalent chromium (the more toxic form) in air of 0.6 ($\mu g/m^3$), this assumes a continuous exposure for one year. These samples were analyzed for total chromium (trivalent and hexavalent). The Cr detected was *below* the EPA screening level.

The EPA screening level for Mn is 0.5 $\mu g/m^3$ (three-month average). The Mn detected (0.0175 $\mu g/m^3$) in one outdoor sample (M1) was *below* the EPA screening level.

The EPA has no ambient standards or screening levels for the other metals detected in the outdoor air.

ATC appreciates the opportunity to provide this indoor air quality service to the DOE. If you have any questions concerning this report, please call (212) 353-8280 extension 212.

Sincerely,
ATC Associates, Inc.

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

Attachment

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