NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.

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February 25, 2002

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

Re: Air Sampling for Metals
P.S. 234M
ATC Project No. 15-19125-0279

Dear Mr. Orlan:

ATC Associates, Inc. (ATC) is pleased to provide this report of air sampling for metals in airborne dust on February 12, 2002, at the referenced school. The New York City Board of Education (BOE) requested this sampling at the recommendation of Environ Corp., the consultant retained by the parents association.

Scope of Work

ATC collected four (4) samples for metals at specified locations. Samples were collected for a minimum of eight (8) 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. Two (2) samples were collected inside the building and two (2) were collected outdoors. One blank sample was 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 eleven (11) metals. The metals were aluminum (Al), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), iron (Fe), magnesium (Mg), manganese (Mn), molybdenum (Mo), nickel (Ni) and zinc (Zn). A copy of the analytical report is attached.

The sampling locations were the Main Entrance Lobby, 1st floor Hallway, the west Playground 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.* The Environmental Protection Agency (EPA) has set a screening level for hexavalent chromium (the more toxic form) in air of 0.6 ug/m^3, this assumes a continuous exposure for one year. These samples were analyzed for total chromium (trivalent and hexavalent).

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Results

Chromium (Cr) was the only metal detected. It was found in all four samples and in the blank. Blank-correcting the samples lowers the Cr concentrations substantially.

The results are shown in the following table:

CHROMIUM (Cr) IN AIR CONCENTRATIONS
FEBRUARY 5, 2002

LOCATION / SAMPLE NO.	Cr IN SAMPLE (ug/sample)	Cr IN AIR (ug/m^3)	Cr IN AIR BLANK-CORRECTED (ug/m^3)
Main Lobby / M1	0.381	0.317	**BDL***
1st floor Hallway / M2	0.432	0.360	**0.042**
West Playground/ M3	0.506	0.421	**0.103**
Roof / M4	0.576	0.480	**0.162**
Field Blank / M5	0.382	---	---

* Below Detection Limit

All of the blank-corrected Cr concentrations are ***below*** the EPA screening level of 0.6 ug/m^3.

ATC appreciates the opportunity to provide this indoor air quality service to the BOE. Please call me at (212) 353-8280 extension 212 if you have any questions.

Sincerely,
ATC Associates, Inc.

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

Attachment

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