NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.

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September 9, 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 Sampling for Metals
P.S. 1M
ATC Project No. 15-19125-0340

Dear Mr. Orlan:

ATC Associates, Inc. (ATC) is pleased to provide this letter report of air sampling for metals in airborne dust on August 27, 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 three (3) samples for metals at specified locations. Samples were collected for a minimum of ten (10) hours using 37 mm mixed cellulose ester filter connected to battery-powered sampling pumps at a flow rate of 2 liters per minute. Pumps were calibrated before and after each sampling period. All three samples were collected inside the building. Two blanks for quality control were submitted. The additional blank was included to confirm the levels of any trace contaminants in the filters. The samples were sent to PSC Analytical Services, Inc., an American Industrial Hygiene Association-accredited laboratory in Reading, PA. Analysis was performed by NIOSH Method 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 laboratory report is attached.

The sampling locations were the Main Entrance Lobby, 2nd Floor Hallway by Room 213 and 4th Floor Hallway by Room 403.

Wagdi Abdelshahid, Industrial Hygienist and Jimmy Choy, Environmental Technician from ATC's New York City office, conducted the sampling consistent with accepted industrial hygiene practices. The results represent the conditions on the day the samples were collected.

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

The metals detected in all the samples were aluminum (Al) and chromium (Cr). Al was detected in one of the blanks and Cr was also detected in both the blanks. The other ten metals were not detected.

Blank-correcting the Cr concentrations (blank average: 0.5465 micrograms per filter) reduces them to below the limit of detection. Blank-correcting the Al concentration (blank: 1.02 micrograms per filter) reduces them to below the limit of detection.

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). All Cr concentrations were *below* the EPA screening level.

The EPA has no standard or screening level for Al in ambient air.

ATC appreciates the opportunity to provide this indoor air quality service to the DOE. Please call (212) 353-8280 extension 212 or 370 if you have any questions.

Sincerely,
ATC Associates, Inc.

Tenzin Namgyal
Industrial Hygienist

Reviewed by:

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

Attachment

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