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January 15, 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: Wipe Samples for Metals
 High School for Leadership & Public Service (894M)
 ATC Project No. 15-19125-0290**

Dear Mr. Orlan:

ATC Associates Inc. (ATC) is pleased to provide this report of the results of the wipe samples for metals collected on January 2, 2002, at the referenced location. The New York City Board of Education (BOE) requested these samples to determine levels of metals on various surfaces within the school building.

Scope of Work

ATC collected surface wipe samples from various surfaces for analysis of eleven metals.

Tenzin Namgyal and Wagdi Abdelshahid, Industrial Hygienists from ATC's New York City office, collected the samples. Eight samples were collected using Palintest® dust wipes. The area of each sample was one square foot (1 ft²).

The samples, plus one blank, 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 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.

ATC's findings are based on the laboratory sample results and the conditions present in the school at the time of the assessment.

The sampling was performed consistent with generally accepted industrial hygiene practices. There were inherent limitations created by constraints of time, operational and work practice variability, variations in contaminant concentrations, and sampling and analytical accuracy. The results of the sampling represent conditions found on the dates the samples were collected.

There are no established regulatory values for these metals on indoor surfaces. The New York State Department of Environmental Conservation (NYSDEC) has clean-up objectives for metals in soil but not for interior surfaces. There are no Occupational Safety and Health Administration (OSHA) standards that are applicable to this circumstance.

Wipe Sample Results

Metals were detected in all eight samples. Al, Cr, Cu, Fe, Mg, Mn and Zn were found in all samples. Ni was detected in three samples and Cd was detected in two samples. Copper, iron, magnesium and zinc were also recovered from the blank. Co and Mo were not detected in any of the samples. Metal concentrations are shown in the following table. Sample area was 1 ft².

TABLE			
METAL CONCENTRATIONS (micrograms/sample)			
METAL	RANGE	NO. OF SAMPLES	LOCATION OF MAX.
ALUMINUM (Al)	10.5 – 109	8	Main Lobby Floor
CADMIUM (Cd)	0.304 – 0.330	2	Room 1106 Floor
CHROMIUM (Cd)	0.263 – 1.71	8	Room 903 Floor
COBALT (Co)	**BRL	0	-----
COPPER* (Cu)	4.36 – 57.2 (0.342)	8	Cafeteria Serving Window
IRON* (Fe)	31.9 – 546 (5.89)	0	Main Lobby Floor
MAGNESIUM* (Mg)	52.3 – 174 (35.4)	8	Main Lobby Floor
MANGANESE (Mn)	0.596 – 6.91	8	Main Lobby Floor
MOLYBDENUM (Mo)	BRL	0	-----
NICKEL (Ni)	0.514 – 0906	3	Main Lobby Floor
ZINC* (Zn)	14.4 – 183 (4.64)	8	Room 1106 Floor

*Metal also detected in blank, concentration is shown in parentheses.

**BRL = Below Reporting Limit

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Findings

Detectable levels of nine of eleven metals were found in the samples from all eight interior surfaces tested. The highest levels of Al, Fe, Mg, Mn and Ni were found on the Main Lobby floor. Cd and Zn were the highest on the floor in Room 1106 and Cr was the highest in Room 903. The highest Cu concentration was found in the sample from the Cafeteria serving window.

ATC does not know the source(s) of these metals or when they were deposited.

ATC appreciates the opportunity to provide this indoor environmental service to the BOE. Please call (212) 353-8280 extension 212 or 261 if you have any questions.

Sincerely,
ATC Associates, Inc.



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

Attachment.