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January 18, 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
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 the wipe samples for metals collected on January 11, 2002, at the referenced location. The New York City Board of Education (BOE) requested these samples to evaluate possible contamination from metals in the school building according to the recommendation of Environ Corp., consultant to the parents association.

Scope of Work

ATC collected wipe samples from three (3) surfaces in the playground for analysis of eleven metals.

Marianna Medinets, Environmental Technician from ATC's New York City office, collected the samples. The samples were collected using Palintest® dust wipes. The surface area tested for 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 provided in Attachment 1.

ATC's findings and conclusions 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 metal 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 (see Attachment 2). There are no Occupational Safety and Health Administration (OSHA) standards that are applicable to this circumstance.

Wipe Sample Results

Metals were detected in all three samples, however Cd, Co, Mo and Ni were not detected. Al, Cu, Fe, Mg, Mn and Zn were found in all samples. Chromium was detected in one sample. All of the metals detected, except Cr, were also found in the blank. Cu was not detected in the samples at a level greater than in the blank. Metal concentrations are shown in the following table.

TABLE
CONCENTRATIONS OF METALS DETECTED
Micrograms per square foot (ug/ft²)¹

METAL	SAMPLE M-01	SAMPLE M-02	SAMPLE M-03	SAMPLE M-04 (Blank) ²
ALUMINUM (Al)	26.6	18.2	24.2	6.25
CHROMIUM (Cr)	0.788	BRL ³	0.229	BRL
COPPER (Cu)	1.91	1.22	2.06	2.46
IRON (Fe)	100	59.5	83.2	5.89
MAGNESIUM (Mg)	68.6	64.7	83.3	30.1
MANGANESE (Mn)	1.37	1.02	3.75	BRL
ZINC (Zn)	11.6	7.76	8.26	3.22

¹ 1 ft² is approximately 100 cm² ² Blank results are in ug/sample ³ Below Reporting Limit

Cr and Mn were the only metals found in the samples but not in the blank. After the blank concentration is subtracted, the Cu level drops to below the detection limit. The metals found in the highest concentrations were Fe and Mg.

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

Sincerely,
ATC Associates, Inc.

A handwritten signature in black ink, appearing to read "James R. Cohn", written over a horizontal line.

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

Attachment

ATTACHMENT 1
ANALYTICAL REPORT
WIPE SAMPLES FOR METALS