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March 29, 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
 High School for Leadership & Public Service (M894)
 ATC Project No. 15-19125-0290**

Dear Mr. Orlan:

ATC Associates, Inc. (ATC) is pleased to provide this letter report of air sampling for metals conducted on March 1, 2002, at the referenced school. The New York City Board of Education (BOE) requested these samples to determine if acceptable air quality is being maintained.

Scope of Work

ATC collected four (4) samples for metals in air. Samples were collected for ten (10) hours. Three (3) samples were collected inside the building and one (1) was collected outdoors. One blank filter was also submitted. The samples were sent to PSC Analytical Services, Inc., an American Industrial Hygiene Association-accredited laboratory in Reading, PA. Copies of the analytical reports are attached.

The samples were collected 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. Analysis was performed by NIOSH Methods 7300M. Each sample was analyzed for cadmium (Cd), chromium (Cr) and lead (Pb).

The locations of the samples were the Roof by air intake, 1st floor Main Lobby, 5th floor Hallway near the elevator and the 10th floor Hallway near the elevator.

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 materials in indoor air in non-industrial situations.*

Results

Chromium (Cr) and lead (Pb) were found above the limits of detection. Cr was also detected in the blank. Cr has typically been detected as a trace contaminant of the filters.

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SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

Mr. Bernard P. Orlan
 Air Sampling for Metals
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The Cr concentrations in these samples are shown in Table 1.

TABLE 1
CHROMIUM (Cr) IN AIR CONCENTRATIONS
 March 1, 2002

LOCATION SAMPLE NO.	Cr IN SAMPLE (ug/sample)	Cr IN AIR (ug/m ³)	Cr IN AIR BLANK-CORRECTED (ug/m ³)
1 st Floor Lobby M1	0.563	0.469	0.143
5 th Floor Hallway by elevator / M2	0.638	0.532	0.206
10 th Floor Hallway by elevator / M3	0.415	0.346	0.02
Roof / M4	0.700	0.583	0.257
Blank / M5	0.391	--	--

The Environmental Protection Agency (EPA) has set a screening level for hexavalent chromium (the more toxic form) in air of 0.6 ug/m³, this assumes a continuous exposure for one year. The samples here were analyzed for total chromium (trivalent and hexavalent). All of the Cr concentrations detected here are *below* the EPA screening level.

The other metal present over the limit of detection was Pb. The Pb concentrations are shown in Table 2.

TABLE 2
LEAD (Pb) IN AIR CONCENTRATIONS
 March 1, 2002

LOCATION SAMPLE NO.	Pb IN SAMPLE (ug/sample)	Pb IN AIR (ug/m ³)	Pb IN AIR BLANK-CORRECTED (ug/m ³)
1 st Floor Lobby M1	0.327	0.272	BDL*
5 th Floor Hallway by elevator / M2	BDL	BDL	--
10 th Floor Hallway by elevator / M3	0.311	0.259	BDL
Roof / M4	0.344	0.287	0.005
Blank / M5	0.338	--	--

* Below Detection Limit

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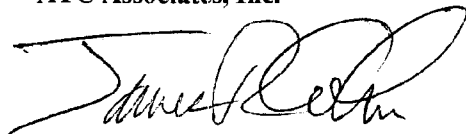
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The blank-corrected Pb concentrations were below the limit of detection (0.3 ug) except for the roof sample (M4) which was just above the limit. The EPA has set an ambient air quality standard for Pb of 1.5 ug/m³ (3-month average). The Pb concentrations detected here were all well below this standard.

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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CITY_21MC100_003431661

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008