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January 22, 2002

Mr. Bernard P Orlan
Director, Environmental Health & Safety
New York City Board of Education
28-11 Queens Plaza North
Long Island City, NY 11101-4008

**Re: Air Samples for Polynuclear Aromatic Hydrocarbons
High School of Economics and Finance
100 Trinity Place
New York, New York
ATC Project No. 15-19125-0291**

Dear Mr Orlan:

ATC Associates Inc. (ATC) is pleased to provide this report of the results of air samples for polynuclear aromatic hydrocarbons (PAHs) collected on January 14, 2002, at the referenced location. The New York City Board of Education (BOE) requested these samples to evaluate possible contamination in the school building.

SCOPE OF WORK

Tenzin Namgyal and Wagdi Abdelshahid, Industrial Hygienists of ATC's New York City office, collected the samples.

The samples were collected using Teflon® filters and XAD-2 tubes connected in series to battery-powered sampling pumps set at a flow rate of 2.0 liters per minute. The samples were analyzed by PSC Analytical Services, Inc (PSC), an American Industrial Hygiene Association-accredited laboratory in Reading, PA. Analysis was performed according to NIOSH Method 5506.

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 contaminant concentrations, and sampling and analytical accuracy. The results of the sampling represent conditions found on the dates the samples were collected.

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SAMPLING RESULTS

ATC submitted nine (9) samples PAHs (plus one blank) to PSC for analysis. A copy of the laboratory report is provided in the Attachment. Samples were collected from locations throughout the building. The minimum collection time for each sample was ten (10) hours.

Each sample was analyzed for sixteen (16) PAHs (See Attachment). Three PAHs were detected indoors and outdoors. The sample locations and concentrations are shown in the table.

PAHs DETECTED
Milligrams per cubic meter of air (mg/m³)

LOCATION SAMPLE NO.	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene
Outdoors, Main entrance PAH-1	0.00026	0.00052	0.00099
Main Lobby PAH-2	*BDL	BDL	0.00028
3 rd floor by Stair B PAH-3	0.00022	0.00039	0.00058
5 th floor, Stair A PAH-4	0.00023	0.00046	0.00068
7 th floor by bridge PAH-5	0.00026	0.00047	0.00050
8 th floor, Kitchen PAH-6	0.00025	0.00048	0.00042
Room 906 PAH-7	BDL	0.00039	0.00045
Room 1006 PAH-8	0.00027	0.00053	0.00076
Roof by air intake PAH-9	BDL	0.00030	0.00037
Blank PAH-10	BDL	BDL	BDL

*BDL = Below Detection Limit

1-Methylnaphthalene was detected in one of the two outdoor samples and in five of the seven indoor samples, all in comparable concentrations. 2-Methylnaphthalene was detected in both outdoor samples and in all but one indoor sample, concentrations were similar. Naphthalene was detected in all samples. The high and low indoor concentrations differed by a factor of 3. Outdoor concentrations also differed by a factor of 3, the higher concentration being detected in the main entrance sample. Outdoors, higher concentrations of all three PAHs were found in the street level sample.

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Naphthalene is an aromatic hydrocarbon used in the manufacture of plastics, dyes, resins and pesticides. It is a common component of mothballs. The two methylated derivatives are found in some plastics and wood treatment chemicals. ATC has no specific information concerning possible sources of these PAHs in the school building.

The Occupational Safety and Health Administration (OSHA) has a Permissible Exposure Limit (PEL) for PAHs (benzene-soluble fraction of total particulates) of 0.2 mg/m^3 . This is three orders of magnitude greater than the levels found in these samples, however the PEL is intended for industrial exposures.

It is our pleasure to provide these indoor environmental services to the New York City Board of Education. If you have any questions about this report, please call (212) 353-8280, extension 212 or 261.

Sincerely,
ATC ASSOCIATES INC.



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

Attachment

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