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June 6, 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 Hydrocarbons
High School of Economics and Finance
ATC Project No. 15-19125-0279**

Dear Mr. Orlan:

ATC Associates, Inc. (ATC) is pleased to provide this letter report of air sampling for hydrocarbon compounds conducted on May 4 and 11, 2002, at the referenced school. The New York City Board of Education (BOE) requested this sampling to evaluate air quality in the school building prior to re-occupancy.

Scope of Work

On each day, ATC collected four (4) samples for hydrocarbon compounds (HC) at locations throughout the building. Samples were collected for a minimum of ten (10) hours using activated coconut shell charcoal tubes connected to battery-powered sampling pumps at a flow rate of 0.2 liters per minute. Pumps were calibrated before and after each sampling period. Seven (7) samples were collected inside the building and two (2) were collected outside. One blank tube was also submitted. The samples were sent to PSC Analytical Services, Inc., an American Industrial Hygiene Association-accredited laboratory in Reading, PA. Analysis was performed by capillary gas chromatography/flame ionization detection (NIOSH Methods 1003, 1005, 1022, 1300, 1500, 1501).

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

Each sample was analyzed for a panel of sixteen (16) specific HC compounds. These compounds were: pentane, acetone, methylene chloride, hexane, chloroform, methyl chloroform, benzene, 1,2-dichloroethane, trichloroethylene, toluene, perchloroethylene (tetrachloroethylene), chlorobenzene, ethylbenzene, styrene, cumene and xylenes. In addition, two non-identified peaks, total other A hydrocarbons and total other B hydrocarbons, were reported. The total other A-hydrocarbons (TOAHC) are those, such as gasoline or light alcohols, with boiling points less than that of benzene (176°F). The total other B-hydrocarbons (TOBHC) are those, such as mineral spirits or petroleum naphtha, with boiling points greater than that of benzene. A copy of the analytical report is attached.

The sampling locations were: 1st floor Main Lobby, 5th floor by Stair B, 10th floor by Stair B, and the Roof.

Mr. Bernard P. Orlan
Air Sampling for Hydrocarbons
H. S. of Economics & Finance (833M)

June 6, 2002
Page 2
ATC Project No. 15-19125-0291

Results

On May 4, None of the HCs in the panel were found at levels above the limits of detection for the analyses in any of the samples.

On May 11, TOAHC, TOBHC, ethylbenzene, and xylenes were detected in the Main Lobby. Total B Hydrocarbons was also found on the 10th floor by Stair B. Hydrocarbons were not detected in outdoor samples. The results are summarized in the table below:

**HYDROCARBONS DETECTED
PARTS PER MILLION (PPM)**

LOCATION SAMPLE NO.	TOAHC	TOBHC	Ethylbenzene	Xylenes
Main Lobby VOC1	0.14	13	0.088	0.43
3 rd floor hallway by Stair B VOC3	BDL	0.084	BDL	BDL

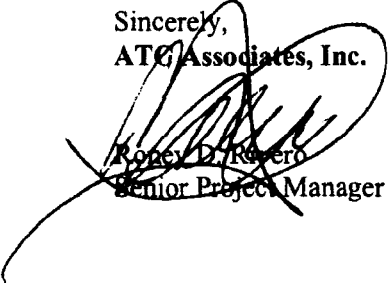
BDL = Below Detection Limit

Hexane was used by ATC to collect wipe samples for polychlorinated biphenyls (PCBs) and the hexane detected in the air samples is most likely the residual from that activity. Hexane was the only hydrocarbon detected in more than one sample.

1, 2-Dichloroethane is used in the production of plastics and as an additive in leaded gasoline, TOBHC include substances such as mineral spirits that are components of paints and coatings. These two hydrocarbons were detected only in the main lobby sample, they were not detected elsewhere in the building or outdoors.

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

Sincerely,
ATC Associates, Inc.



Roney D. Romero
Senior Project Manager



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

Attachment