



104 East 25th St., 10th Fl.
New York, New York 1001
www.atc-enviro.com
212.353.828
Fax 212.353.830

March 21, 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: Wipe Samples for Dioxins
Stuyvesant High School
ATC Project No. 15-19125-0246**

Dear Mr. Orlan:

ATC Associates Inc. (ATC) is pleased to provide this report of the results of the wipe-samples for polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) collected on February 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 per the recommendation of H. A. Bader, consultant to the parents association.

Scope of Work

Wagdi Abdelshahid, Industrial Hygienist of ATC's New York City office, collected the samples.

The samples were collected using gauze pads and hexane as a solvent. The solvent was provided and samples were analyzed by Pace Analytical Services, Inc. (Pace) of Minneapolis, MN, a laboratory experienced in dioxin analysis. The analysis was performed by modified EPA Method 8290 using combined capillary column gas chromatography/high resolution mass spectrometry.

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.

Results

ATC submitted three wipe samples for PCDDs/PCDFs (plus one blank) to Pace for analysis. Samples were taken from areas specified by the parents association consultant. The sample area for each sample was one square meter (1 m²). The areas sampled were:

- 1st floor main lobby wall;
- 2nd floor bridge entrance wall;
- Mixed air plenum - HVAC# II wall.

CONFIDENTIAL,

CITY_21MC100_003429579

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

Mr. Bernard P. Orlan
Wipe Samples for Dioxins
Stuyvesant High School (Manhattan)

March 21, 2002
Page 2
ATC Project No. 15-19125-0246

Each sample was analyzed for sixteen (16) PCDD/PCDF isomers. The results for each isomer were then converted to 2, 3, 7, 8 tetrachloro-dibenzo-p-dioxin (2, 3, 7, 8-TCDD) equivalents by multiplying by an established equivalency factor. This provides a single value (in nanograms) for the analytical results for each sample. Copies of the draft analysis reports are attached. The results are shown in the following table.

DIOXIN WIPE SAMPLE RESULTS
2, 3, 7, 8 TCDD EQUIVALENTS - Nanograms per square meter (ng/m²)

LOCATION /SAMPLE ID	DIOXIN CONCENTRATION
1 ST Floor Lobby Main Entrance / DX1	0.000028
2 ND Floor Lobby Bridge Entrance /DX2	0.000064
HVAC # II Mixed Air Plenum/ DX3	0.0020
Field Blank /DX4	0.0043

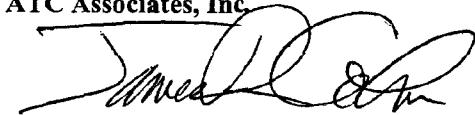
The New York State Department of Health (NYSDOH) established guidelines for dioxin for the re-occupancy of the Binghamton State Office Building following a PCB fire. The NYSDOH guideline for dioxin on surfaces is 25 nanograms per square meter (25 ng/m²). The New York State Department of Environmental Conservation (NYSDEC) has set 0.0006 parts per million (ppm) as the allowable concentration of dioxin in soil. The EPA has established a residential clean-up goal of 1 part per billion (ppb).

The concentrations on indoor surfaces ranged from 0.000028 to 0.0020 nanograms per square meter (ng/m²). The levels found in all of these samples are below the NYSDOH guideline of 25 ng/m².

It is not possible to determine when the 2, 3, 7, 8 - TCDD equivalents detected in this sample was deposited. Dioxin samples were not collected from these locations prior to November 8, 2001, and therefore a background sample is not available for comparison purposes.

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

Sincerely,
ATC Associates, Inc.



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

Attachment

CONFIDENTIAL,

CITY_21MC100_003429580

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008