NYC 9/11 Public Portal Document

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November 25, 2002

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

**Re: Wipe Samples for Dioxins**
**Benjamin Altman School (P. S. 42 Manhattan)**
**ATC Project No. 15-19125-0342**

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 September 4, 2002, at the referenced location. The New York City Department of Education (DOE) requested these samples to evaluate possible contamination in the school building.

## Scope of Work

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.

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

## Results

ATC submitted three wipe samples for PCDDs/PCDFs to Pace for analysis. Samples were taken from representative floor areas throughout the building. The sample area for each sample was one square meter (1 $m^2$). The areas sampled were:

- Main Lobby;
- 2nd Floor by Room 207;
- 3rd Floor by Room 309.



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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. A copy of the laboratory analysis report is attached. The results are shown in the following table.

**DIOXIN WIPE SAMPLE RESULTS**
**2, 3, 7, 8 TCDD EQUIVALENTS - Nanograms per square meter ($ng/m^2$)**
**September 4, 2002**

| LOCATION /SAMPLE ID | DIOXIN CONCENTRATION |
|---|---|
| Main Lobby / DX1 | 0.013 |
| 2nd Floor by Room 207 /DX2 | 0.00068 |
| 3rd Floor by Room 309 / DX3 | 0.0013 |

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 $ng/m^2$).

The concentrations on indoor surfaces ranged from 0.00068 to 0.0013 nanograms per square meter ($ng/m^2$). The levels found in all of these samples are below the NYSDOH guideline of 25 $ng/m^2$.

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

It is our pleasure to provide these indoor environmental services to the NYC Department 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



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