NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.

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October 3, 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**
**P. S. 89M**
**ATC Project No. 15-19125-0297**

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 August 20, 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

The samples were collected using gauze pads and hexane as a solvent. The pads and solvent were 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.

Tenzin Namgyal, 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.

## WIPE SAMPLING RESULTS

ATC submitted three (3) wipe samples for PCDDs/PCDFs to Pace for analysis. A copy of the laboratory analysis report is provided in the Attachment. The area of each sample one (1) square meter ($1m^2$).

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.



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The sample locations and the results are shown in the table:

**DIOXIN WIPE SAMPLE RESULTS**
**(2, 3, 7, 8 TCDD EQUIVALENTS)**
**August 20, 2002**

| LOCATION/SAMPLE NUMBER | DIOXIN CONCENTRATION ($ng/m^2$) |
|---|---|
| 1st Floor Hallway-north/DX1 | 0.000059 |
| 1st Floor Hallway-south/DX2 | 0.00096 |
| 2nd Floor Hallway-south/DX3 | 0.00032 |

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 0.000059 to 0.00096 nanograms per square meter ($ng/m^2$) for all readings. The dioxin concentrations in all of these sample are ***below*** the NYSDOH guideline.

It is not possible to determine when the 2, 3, 7, 8 - TCDD equivalents detected in these samples were deposited. Dioxin samples were not collected from these locations prior to December 20, 2001.

It is our pleasure to provide these indoor environmental services to the DOE. 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



NYC-WTC_000202179