NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.

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May 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: Wipe Samples for Dioxins
Stuyvesant High School (M477)
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 May 1, 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

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 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 m^2). The areas sampled were:

- 1st floor main lobby wall;
- 2nd floor bridge entrance wall;
- HVAC Unit # I.

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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)

May 1, 2002

LOCATION /SAMPLE ID	DIOXIN CONCENTRATION
1ST Floor Lobby Main Entrance / DX1	0.000043
2ND Floor Lobby Bridge Entrance /DX2	0.000036
HVAC # I/ DX3	0.017

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 0.000036 to 0.017 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 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.

Amel Javal
Senior Project Manager

Reviewed by:

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

Attachment

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