NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.

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February 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
Public School 234M
ATC Project No. 15-19125-0279

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 January 29, 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 Environ Corp., consultant to the parents association..

SCOPE OF WORK

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

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.

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.

SUBSTANCE DESCRIPTION

"Dioxins" or "dioxin" is a name used for a group of chlorinated multi-ringed organic compounds that includes polychlorinated dibenzo dioxins (PCDDs) and polychlorinated dibenzo furans (PCDFs). They are related to polychlorinated biphenyls (PCBs). PCDDs and PCDFs are not produced commercially except for research purposes. They occur as trace level by-products of combustion and industrial chemical processes. Combustion of PCB-containing oils, such as during an electrical transformer fire, is known to produce dioxins. Burning of some plastics may also produce dioxins. Dioxins are toxic and are considered to be carcinogenic.

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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 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).

WIPE SAMPLING RESULTS

ATC submitted two (2) wipe samples for PCDDs/PCDFs (plus one blank) to Pace for analysis. Copies of the draft analysis results are provided in Attachment 1. Samples were taken from areas specified by the parents association consultant. The area of each sample one (1) square meter (1 m^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. The sample locations and the results are shown in the table:

DIOXIN WIPE SAMPLE RESULTS
(2, 3, 7, 8 TCDD EQUIVALENTS)

LOCATION/SAMPLE NUMBER	DIOXIN CONCENTRATION (ng/m^2)
1st Floor Hallway – east end/DX1	0.027
1st Floor Hallway – west end/DX2	0.0029
Blank/DX3	0.00

The concentrations on indoor surfaces were 0.027 and 0.0029 ng/m^2. These levels are well *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 wipe samples were not collected from this school prior to December 6, 2001.

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

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000177807