United Federation of Teachers

Local 2, American Federation of Teachers, AFL-CIO
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Memorandum
October 9, 2001

To: Stuyvesant High School Staff

From: Tom Pappas, UFT Director of Staff
John Soldini, UFT Vice President High Schools
Jerry Goldman, UFT Manhattan Borough Representative
Tom Drumgool, UFT Manhattan High Schools District Representative
Klaus Borneman, UFT Health and Safety Special Representative
Ellie Engler & Chris Proctor, UFT Industrial Hygienists

Re: Re-Occupying Stuyvesant High School

Following the disaster at the World Trade Center on September 11, 2001, the New York City Board of Education closed Stuyvesant High School because it was located in the frozen zone (i.e., the area that was closed off to the public to facilitate the City's recovery and cleanup effort). At this time the area where the school is located is now accessible to the public.

Right after the disaster, the Union worked with the Board of Education (BOE) to develop and implement inspection, environmental monitoring and clean-up protocols at the school. The BOE assessed the building's structural strength and stability as well as the gas, electrical and water service and the New York City Fire Department inspected the fire and life safety alarm systems. The BOE directed the School Construction Authority (SCA) to conduct cleanup and air monitoring of the building.

On October 4, the Union inspected the school along with representatives from the BOE Division of School Facilities Environmental Health and Safety (BOE DSF EHS) and Office of Occupational Safety and Health (BOE OOSH), the SCA, the third party air monitoring firm (ATC) and the Parents' Association consultant, Howard Bader. The visual inspection included an examination of the ventilation system, classroom univents, the roof, the auditorium and random classrooms on each floor.

Following the inspection the Union attended a 2 PM meeting with local and federal agency representatives (including the Environmental Protection Agency, the Agency for Toxic Substances and Disease Registry, NYC Department of Environmental Protection, NYC Department of Health, NYBOE, the SCA, the Parents Association consultant and the school custodian) to review the environmental testing and

cleanup activities at the school prior to re-occupying the building. We also reviewed specific activities to be conducted after the school opens.

On October 5, a team from the Union Health & Safety Committee along with the UFT District Representative met with the UFT Chapter Leader, Dorothy Suecoff to discuss the cleanup and air monitoring activities and tour the school. Representatives from BOE DSF and the SCA also participated for part of that session.

Initial Air, Bulk and Wipe Monitoring

Before BOE DSF EHS and the SCA conducted any cleanup activities at the school, air, bulk, and dust wipe samples were taken in a number of locations by a third-party environmental firm, ATC Associates, on the 9th, 10th and 11th floors on September 21st and analyzed for asbestos. The air samples were analyzed by Transmission Electron Microscopy (TEM, the most sensitive analytical method) for asbestos. There were no detectable asbestos structures in any of the 15 air samples. According to the US Environmental Protection Agency, the regulatory requirement for asbestos is based on continuous exposure to more than 70 asbestos structures (per square millimeter) for an extended period. Three bulk samples of debris were collected from the southeast roof of which 1 sample tested positive for asbestos (i. e., contained greater than 1% asbestos material). Forty dust wipe samples were taken inside the building prior to the cleaning of the school. Thirty-seven indicated no asbestos was detected and three samples tested positive for asbestos. Two of these positive wipe samples were taken in the outside air chambers of the two air-handling units (AHUs) - one in AHU unit # 1 and the other in AHU unit #2. The wipe sample tests are qualitative tests and indicate the presence or absence of asbestos but do not quantify the amounts. Therefore, prior to any cleanup activity in the school the air monitoring results indicated the school met local, state and federal asbestos regulatory criteria for re-occupancy.

On September 29, 2001, dust wipe samples were collected by a third-party environmental firm, ATC Associates, in 61 accessible lockers (out of 3000 lockers) located throughout the building. All 61 wipe samples indicated no asbestos was detected. Based on these results the locked lockers were left as is.

Cleaning of the School

Between September 23rd and October 4th, the SCA cleaned all the rooms, corridors and floors in the school to remove all visible dust and particulates. Hard surfaces were wet-cleaned and then vacuumed with a high-efficiency particulate air (HEPA) vacuum. Floor carpets were HEPA-vacuumed three times. HEPA vacuums have filters designed to remove microscopic particles including dust and debris from the area. In addition, the auditorium carpet was steam-cleaned to remove

stains. Furniture and items found in the school (i.e., books, papers, supplies, fixtures, furniture, etc.) were damp-wiped and/or HEPA-vacuumed. Scaffolding was setup in the auditorium to clean the vents and ceilings. The SCA also power-washed the exterior of the building and cleaned the windows.

Heating, Ventilation, and Air-Conditioning (HVAC) Units & Individual Unit Ventilators (Univents)

The building engineer shut down the HVAC system at the time of the evacuation and prior to the collapse of the two towers. This action minimized the amount of debris infiltrating into the units. The SCA inspected the HVAC units and wet-cleaned and HEPA-vacuumed the interiors of the air-handling units (outside air chamber, mixing chamber, fan coils) and accessible ductwork downstream. Each univent was damp-cleaned and HEPA-vacuumed internally and externally.

BOE DSF removed the air filters from the air-handling units and installed higher-efficiency pleated filters. BOE DSF also removed and replaced the air filters on each of the univents. All filters will be changed on a monthly basis.

Roof and Walkway

BOE DSF EHS and the SCA inspected the roof areas, especially near the outside air intakes, found debris and cleaned accordingly. The West Walkway Bridge has been wet-cleaned and HEPA-vacuumed. A number of barrier dust mats have been installed on the walkway and will be cleaned as needed when the building reopens.

Post-Cleanup Air Monitoring

After the cleanup the air was again sampled by two third-party air monitoring firms and analyzed by Transmission Electron Microscopy. In an effort to provide quality control and quality assurance the Union requested that BOE DSF and the SCA utilize two third-party air monitoring firms. The two firms were ATC Associates and Taylor Environmental. All of the following air monitoring results indicate the school meets local, state and federal asbestos regulatory criteria for re-occupancy. The sampling results are as follows:

On September 30th, ATC Associates took 27 air samples on the 6th through the 11th floors and on escalators running from the 5th through the 9th floors. There were no detectable asbestos structures in any of the 27 air samples.

On September 30th, 66 air samples were taken by Taylor Environmental Group on the 6th through the 11th floors and on escalators running from the 5th through the 9th floors. Asbestos structures (1 or 2 structures) were detected in 15 samples but were below the regulatory requirement of 70 structures per square millimeter.

On October 3rd, 61 air samples were taken by Taylor Environmental Group on the 2nd through the 5th floors and on escalators running from the 2nd through the 5th floors. Asbestos structures (1 or 2 structures) were detected in 7samples but were below the regulatory requirement of 70 structures per square millimeter.

On October 3rd, ATC Associates took 66 air samples on the 2nd through the 5th floors and on escalators running from the 2nd through the 5th floors. No asbestos structures were detected in 26 samples. One sample had 1 asbestos structure detected but was below the regulatory requirement of 70 structures per square millimeter.

Outside Air Monitoring

On October 4th, 5 air samples were taken by ATC Associates outside the school building and analyzed by TEM. No asbestos structures were detected in any of the 5 samples.

On October 5th, 7 air samples were taken by ATC Associates outside on the north side of the school building as well as on the roof and analyzed by TEM. No asbestos structures were detected in 6 of the samples and 1 sample had 1 asbestos structure detected.

Additional Air Monitoring on October 4, 2001

The Union wanted to ensure that once the ventilation units were turned on, the air quality would not be affected. As a precaution, filter material was installed on the top of each univent grille and supply air diffuser prior to the activation of the system. All ventilation units were turned on for approximately two hours and then turned off in order to remove all the external filter material. At the Union's request, "aggressive" air monitoring was conducted as an additional precaution. The PA consultant was present during the sampling and determined the sampling locations. Then air samples were taken in various locations on each floor while a leaf blower (aggressive sampling) was operated in order to stir up any possible dust. The 53 samples were analyzed by TEM and no asbestos structures were detected in any of the samples. These sample results indicate the school meets local, state and federal asbestos regulatory criteria for re-occupancy.

At the Union's request the following arrangements have been made:

- When school re-opens, the BOE will provide:
  - Additional custodial workers to assist in any requests for spot cleaning. The custodial staff will also have HEPA vacuums on-site that will remain at the school.
  - Trauma counselors

- New York City Department of Health nurses

- The Board has removed and will replace all food items from the kitchen areas.

- Occupants will be instructed to keep windows and other outside entry points closed and rely on the HVAC (heating, ventilation, and air-conditioning system) for filtered air.

- BOE DSF will periodically inspect the roof and other accessible outside areas for particulate debris and wet down and/or remove any dust and debris. Particular attention will be paid to areas near the outside air intakes.

- As a precaution a procedure will be established to shut down the outside air intakes to their minimal setting (10% outside air) or if necessary to shut down the HVAC system when school occupants detect odors from the World Trade Center debris piles or air monitoring results indicate a potential problem.

- Barrier mat(s) will be installed at the entrances to reduce tracking dust and dirt inside the building.

- Barrier mats have been installed on the West Walkway Bridge. An additional security guard will be stationed in the bridge to direct students to the school building and restrict access only to authorized persons. An additional custodial cleaner will also be stationed in the walkway.

- The Board will develop a written environmental monitoring protocol and will conduct daily air monitoring inside and outside the school for asbestos, respirable particulates, volatile organic compounds, and carbon monoxide. The daily monitoring will be reevaluated after two to three weeks. The Board will provide several carbon monoxide detectors for the school.

- The UFT will develop a proposal to oversee an environmental monitoring project to be conducted by interested Stuyvesant science staff and students for Stuyvesant, PS 234M, IS/PS 89M and PS 150M. If the school accepts the proposal the UFT will assist in the implementation of the project.

- Adjacent to the north side of the school, there is a debris disposal and barge operation. The debris is unloaded from the trucks and placed onto a barge. The New York City Department of Environmental Protection (NYCDEP) has implemented procedures to ensure that the WTC debris is adequately misted when the trucks are loaded with debris and then during the barge transfer and

loading operations. This procedure was in place by the time the Union visited the school on the next day (October 5th).

- The US Environmental Protection Agency (EPA) is conducting outside asbestos air monitoring at 4 locations proximal to the barge operations and the New York City Department of Environmental Protection (NYCDEP) is conducting such monitoring at 1 location in front of the school. Daily monitoring results will be transmitted to the New York City Department of Health (NYCDOH) and BOE DSF EHS to make available to the school and the UFT. (In the near term NYCDEP will begin posting their monitoring results on their website as well as the EPA's website).

- City, State, and Federal agencies are also conducting environmental monitoring (air, drinking water, and runoff water) in lower Manhattan. Attached are factsheets, including environmental monitoring data, updated regularly on the Internet websites.

- Please report any concerns or complaints to the Chapter Leader and the Union will address it immediately.

NEW YORK CITY SCHOOL
CONSTRUCTION AUTHORITY

October 5, 2001

Mr. Rajaappan Radhakrishnan
Director of Asbestos Control Program
NYC Department of Environmental Protection
59-17 Junction Boulevard, 8th Floor
Corona, NY 11368

Re: Air Monitoring Results for Stuyvesant H.S.
345 Chambers St., NY. NY.

Dear Mr. Radhakrishnan:

Enclosed please find a complete data package of the air quality sampling results for the above referenced school. This package includes data from both Taylor Environmental Group and ATC Associates.

Should you have any questions, please do not hesitate to call me.

Sincerely,

for Alexander Lempert
Director, Industrial and Environmental Hygiene

Enclosures

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