

Gilsenan, Michael

From: Dave Stanke [davestanke@cs.com]
Sent: Monday, December 16, 2002 2:06 PM
To: Theodorellys, Penny; Gilsenan, Michael
Cc: [REDACTED] PII

David E. Stanke; [REDACTED] PII

Subject: FW: 114 DEP Spec Comments

Importance: High



Comments re 114
 Liberty cleanl...

Mike,

I sent this to Penny and wanted to also discuss it with you. We clearly believe that we require a greater scope of work than is covered in your proposal for 114 Liberty. Attached are the comments of our environmental specialist. Implied in these comments is the scope of work that we require. We want to create our own scope of work and make that part the document that you put out to bid for our building. We don't want to have to hire one contractor to do half of the job, then switch to a contractor you select to complete the work.

Please review our issues so we can discuss enhancements to your proposed scope of work. Please call me to confirm receipt and determine next steps. Some work on our building is proceeding ahead of schedule, so we will be able to start the cleanup in January.

Thanks,
 Dave Stanke

Thanks,
 Dave Stanke

-----Original Message-----

From: Dave Stanke [mailto:davestanke@cs.com]
Sent: Friday, December 13, 2002 11:40 AM
To: Penny Theodorellys; Jack Springston
Cc: [REDACTED] PII

[REDACTED] PII

[REDACTED] PII

David Stanke; [REDACTED] PII

[REDACTED] PII

PII

Subject: FW: 114 DEP Spec Comments

Penny,

Attached is a review of the DEP specs provided to us by Ambient Group and Jack Springston, our environmental consultant. We need to address quickly the scope of work so that we can bid out the project and get work underway. Please pass this information along to anyone in your department who needs to review it and let's schedule a meeting to discuss and finalize the scope.

We will have our own specifications completed shortly.

Thanks,
 Dave Stanke

Ambient Group's comments regarding the "Cleaning Procedures for 114 Liberty Street", as prepared by the NYC DEP, and the "Specifications for the Cleaning of the HVAC Systems", as prepared by EMTEQUE Corporation for the NYC DEP.

A. GENERAL CLEANING PROCEDURES:

1. The specifications essentially only address the asbestos contamination and do not provide any direction as to how to abate any contaminants, which may require special cleaning procedures (i.e., PCBs or dioxins).
2. The specifications allow the contractor to do superficial cleaning of certain items, such as built-in furniture, kitchen stoves, refrigerators, dishwashers, etc., thereby ignoring those contaminants that settled behind, under or inside these items.
3. The specifications, for the most part, do not address how to remove the dust and contaminants, which have settled into the small gaps between the floorboards. It also does not address the dust and contaminants that have settled into the interstitial spaces between the walls.
4. The specifications are extremely vague on how the dust and contaminants above the suspended ceilings (which act as return air plenums for the HVAC units) will be cleaned, though it does state that the ceiling shall not be damaged. How, then, can the space above the ceiling be cleaned? The specifications also state that care must be taken not to disturb the fireproofing (which is located in the return air plenum). Is there any data to suggest that no dust or contaminants are present on the surface of the fireproofing? If not, how is the contractor supposed to clean the fireproofing if they are not allowed to disturb it?
5. The clearance criteria are not clearly spelled out and appear to be focused mainly on airborne concentrations of (presumably) asbestos. The specification also mentions wipe sampling for metals, but does not stipulate which metals or what are considered "acceptable" levels. They make mention of clearance criteria as established by the USEPA for this clean-up activity. However, based on our review of the documents in question, Ambient Group feels that the logic applied in determining what contaminants to test for was inherently flawed. According to the EPA, they only focused on those contaminants that had been found in air samples collected around Ground Zero, and basically ignored sampling results from settled dust samples that indicated other contaminants were also present. This is somewhat like being on a golf course and saying there isn't a Canadian geese problem because you don't see any flying in the air above you, even though there is a huge flock of geese grazing in the fairway right in front of you! In addition, by only focusing on airborne concentrations they are ignoring the possibility of either dermal (skin) absorption of certain contaminants, or hand-to-mouth transfer of contaminants, a factor which is crucially important when you are dealing with an environment where children are likely to be living in on a daily basis.

B. HVAC CLEANING SPECIFICATIONS:

1. The specifications state that the kitchen and bathroom exhaust systems are not included in this program. If not, under which program are they addressed?
2. The specifications allow the contractor to determine appropriate methods, tools and equipment required to do this project, rather than stipulating what needs to be done, how to do it, and what to use to get it done. This is, in a word, ludicrous.
3. The Inspector Qualification requirements, for the individual who will perform the HVAC cleanliness inspection (to determine if cleaning is even required), are incredibly vague. Also, are we to rely on just a visual inspection by this "qualified" person to determine if cleaning needs to be done or not? Why is there no provision for any sampling, as most of the contaminants that are present (i.e., asbestos fibers, dioxin, etc.) typically cannot be seen by the naked eye?
4. The NADCA standards that they continually refer to only apply to the general cleaning of HVAC systems and their related ducting, due to the typical build-up and deposition of normal dust that occurs over years and years of usage. This standard has absolutely no purpose being cited here since 1) the dust deposited within the various systems had nothing to do with their normal operation, and 2) the dust deposited is far from what would be considered normal. What we are dealing with in this situation is a dust that is, in general, far smaller in diameter than what we normally find in urban settings (therefore it was distributed throughout the area much more widely and efficiently) and contains numerous contaminants that would not normally be found in urban dust (including asbestos, PCBs, dioxins, etc., etc.).
5. Upon further examination, it appears that the HVAC cleaning specification that was "developed" is, in fact, a copy of the standard specifications that were developed by NADCA, with only minor revisions made to it. It is, in no way, site specific and fails to address the unique conditions that are present at 114 Liberty Street. For instance, the cleaning specification developed by the NYC DEP calls for all work to be done as an asbestos abatement project. The HVAC cleaning specifications, however, fail to even mention that asbestos is present. The HVAC cleaning specifications also fail to note that most, if not all, of the supply air ductwork is internally lined with fiberglass - an obviously porous material which cannot simply be decontaminated via HEPA vacuum techniques. Additionally, such a cleaning method for this type of material is not even allowed under the asbestos abatement regulations, and yet this specification implies that this would be acceptable. The specification also talks about cleaning return air ducts, even though there are none in any of the apartments.

6. The "clearance criteria" called for would be laughable, were one not to consider the situation it is being applied to by the authors. There is, in fact, no clearance criterion whatsoever, other than someone inspecting the ductwork and deeming it "visually" clean. As stated previously, how can it be assured that contaminants, which cannot normally be seen by the naked eye, have been removed without some kind of sampling and analysis? Simply stated, one cannot and to imply otherwise, particularly in this situation, should be considered criminal.

In conclusion, there are numerous deficiencies, omissions and assumptions made by both the NYC DEP and EMTEQUE in their specifications which simply do not address the situation and conditions that we know exist at 114 Liberty Street. Massive amounts of contaminated dust and debris entered and permeated virtually the entire building, yet these specifications only deal with cleaning that dust which is readily visible and easily accessible. In addition, in our opinion the "clearance" criteria (where it is even stated) that they will be using to deem the project complete and the building ready for re-occupancy, fails to take into account that children will be living in this building, and some of the unique and close-up modes of exposure that are often associated with children, but not with adults (i.e., crawling on the floor, constant hand-to-mouth contact, etc.) In some cases, especially with regards to the cleaning of the HVAC systems, they are apparently relying solely on whether or not the areas are visually clean. In other cases, they are apparently ignoring the fact that other potentially hazardous and toxic contaminants have been found (i.e., PCBs and dioxins) and do not even set any type of clearance criteria for these compounds, much the less mention testing for them. Therefore, based upon our review of the documents provided to us, we would strongly recommend that you do not rely upon any cleaning processes that may be performed as part of this proposed project to be complete and suggest that the building is acceptable for re-occupancy as a residential setting.

Sincerely

Signed for Ambient Group, Inc. by:

John P. Springston, CIH, CSP
Director of Field Operations

Gilsenan, Michael

From: Theodorellys, Penny
Sent: Monday, December 16, 2002 2:16 PM
To: 'fitzpatrick.robert@epa.gov'
Cc: Radhakrishnan, Krish; Gilsenan, Michael
Subject: FW: electronic report

-----Original Message-----

From: Benjamin M. Sallemi [mailto:sallemi15@atc-enviro.com]
Sent: Thursday, December 12, 2002 11:05 AM
To: Penny Theodorellys
Subject: electronic report

Penny,

Attached is an electronic copy of the final report for cedar street. If you would like any changes, please let me know. I am working with my lab on getting all dioxin data in the form that EPA requested. Do you know if Mr. Nace just looked at some old data, and said that the TEQ calculations were incorrect? I believe that the newer data was calculated correctly.

Benjamin M. Sallemi
Senior Project Manager
ATC Associates Inc.
104 East 25th Street, 10th Floor
New York, New York 10010

Tel. (212) 353-8280
Fax. (212) 353-8306
email: sallemi15@atc-enviro.com

3/11/2003

FINAL REPORT
WTC UNOCCUPIED BUILDING MONITORING
PROGRAM DOCUMENTATION

125 CEDAR STREET
New York, New York

Prepared For:

New York City Department of Environmental Protection
Bureau of Environmental Compliance
59-17 Junction Boulevard
Flushing, New York 11373

Prepared By:

ATC Associates Inc.
104 East 25th Street, 10th Floor
New York, New York 10010
212-353-8280

ATC Project No. 15.22906.0002 Task 02

December 10, 2002

FINAL DOCUMENTATION

FOR

WTC UNOCCUPIED BUILDING MONITORING PROGRAM
125 CEDAR STREET
NEW YORK, NEW YORK

PREPARED FOR
NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL COMPLIANCE
59-17 JUNCTION BOULEVARD
FLUSHING, NEW YORK 11373

PREPARED BY
ATC ASSOCIATES INC.
104 EAST 25TH STREET, 10TH FLOOR
NEW YORK, NEW YORK 10010

DECEMBER, 2002

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ATC ASSOCIATES INC.

<i>Monitoring Firm:</i>	ATC Associates Inc. 104 East 25 th Street, 10 th Floor New York, New York 10010 212-353-8280
<i>ATC Environmental Representative:</i>	Benjamin M. Sallemi, Senior Project Manager Paul Pavlidis & Chuck Johnson, Project Monitors Edgar Lemanovich & Tim Amstislavskiy, Air Sampling Technicians
<i>Client:</i>	New York City Department of Environmental Protection Bureau of Environmental Compliance 59-17 Junction Boulevard Flushing, New York 11373
<i>Client Representative:</i>	Ms. Penny Theodorellys
<i>Abatement Contractor:</i>	Action environmental Remediation, Inc
<i>Project Location:</i>	125 Cedar Street NYC, NY
<i>Services Performed by ATC Associates Inc.:</i>	Project management of daily air monitoring; wipe sampling analysis, and final clearance sampling during the cleaning of settled dust, as per the monitoring Specifications prepared by NYCDEP.

EXECUTIVE SUMMARY

ATC Associates Inc. (ATC) provided project monitoring, air sampling and management services for the interior dust clean-up activities for the unoccupied building located at 125 Cedar Street, New York, New York. Actual field operations were held from September 12, 2002, with the collection of background wipe samples through November 1, 2002 with the completion of post testing. Background wipe samples for settled dust were analyzed in accordance with the project specifications and the individual analytes were as follows: Lead, Mercury, Poly Aromatic Hydrocarbons, and Dioxin. Clean-up activities within the unoccupied building was conducted in accordance with generally accepted industry practices, as well as the Project specification issued by the New York City Department of Environmental Protection

Action Environmental, a New York State Department of Labor (NYSDOL) licensed asbestos abatement contractor, performed the cleaning services. ATC performed project monitoring, air sampling and management services for the interior dust clean-up activities including; review of contractor worker certification, Contractor oversight, daily collection and analysis of ambient and clearance air sampling.

Prior to the start of cleaning activities, ATC inspected that each area was under negative air flow to ensure compliance with the project Scope of Work Procedures. Negative air flow entailed the installation of negative air units within the apartments, however, because typical cleaning activities included cleaning all surfaces, the apartment units could not be sealed, hence negative pressure wasn't achievable or monitored. As the clean-up project progressed, ATC continuously monitored the Contractor's work practices, generated daily site logs, and collected ambient air samples in areas surrounding the abatement work areas. All ambient air samples collected during this project were less than 70 structures per cubic centimeter as specified, well below acceptable levels established by federal regulations (AHERA).

Once the Contractor completed cleaning activities from within all areas, in accordance with project Scope of Work Procedures, ATC, NYCDEP and EPA visually inspected each work area to ensure the areas were decontaminated to a level of no visible debris. Following this successful final visual inspection, ATC performed final air and wipe clearance sampling in accordance with project Scope of Work Procedures. Air clearance sampling entailed collection of fiberglass air samples, analyzed via NIOSH method 7400 "B" counting rules, crystalline silica, analyzed via NIOSH 7500, as well as an EPA modified Transmission Electron Microscopy (TEM) AHERA standard referred to as PCMe. All TEM air samples were analyzed by ATC's New York City laboratory, with all sample results satisfying the accepted final air clearance criteria of less than or equal to 0.0009 f/cc PCMe.

Clearance wipe sampling was performed consistent with generally accepted industrial hygiene practices. There were inherent limitations created by operational and work practice variability, variations in contaminant concentrations, and sampling and analytical accuracy.

The acceptable results of the sampling represent conditions found on the dates the samples were collected. Individual analytes specified earlier were again analyzed in accordance with the project specifications utilizing the following analytical procedures:

- Lead, EPA Method SW-846-6010B
- PAHs, ASTM-6661-01, EPA Method SW-846-8270C
- Dioxin, ASTM-6661-01, EPA Method SW-846-8290
- Mercury, EPA Method SW-846-7471A

SCOPE OF WORK

All work performed was conducted in compliance with general industry practices, applicable relevant and appropriate regulations, including, but not limited to the USEPA, USDOL, NYSDOL, NYSDEC, NYCDEP, NYCDOS, and NYCDOH. The scope of work entailed a thorough cleaning of visible dust accumulations from all surfaces within each apartment unit, except as noted within the Project specifications. Cleaning entailed the use of water to mist material prior to cleaning without generating water accumulations. All waste was subsequently double bagged and appropriately labeled prior to disposal. On occasion, equipment that proved to be difficult to clean via wet wiping techniques (i.e.: electrical equipment, fin tube radiators, appliances, etc.) was cleaned by using low pressure compressed air to dislodge settled dust prior to cleaning.

PROJECT DESCRIPTION

Work Sequence

The following lists the sequence for cleaning of accumulated dust:

- Mobilized equipment and personnel to job site (ATC and Action).
- Collected and analyzed background wipe samples (ATC).
- Posted warning signs to establish regulated work areas (Action).
- Constructed engineering controls per Contract Documents and current regulations (Action).
- Performed pre-abatement inspection of Contractor engineering controls (ATC).
- Collected ambient air samples to monitor airborne fiber levels (ATC).
- Performed required clean-up of settled dust (Action).
- Performed oversight of Contractor work practices (ATC)
- Performed proper removal and disposal of generated waste from the work areas (Action).
- Performed visual inspections to ensure no visible debris remaining in work areas (ATC).

- Collected and analyzed final air clearance samples (ATC).
- Collected and analyzed final wipe clearance samples (ATC).
- Disassembled and cleaned work area (Action).

Engineering Controls

Action employed the following engineering controls during the removal of all ACM from the work areas:

- Isolated each work area per Contract Documents, and to the satisfaction of the on-site Project Monitor.
- Constructed a three-stage decontamination unit with shower.
- Installed HEPA-filtered negative pressure exhaust fans.
- Engineering controls were inspected by ATC for compliance with all applicable local, state, and federal rules and regulations.

Work Procedures

Measures to minimize the release of fibers during cleaning included:

- Wetting of settled dust with water prior to disturbing.
- Promptly placing removed settled dust in plastic bags for proper disposal.

Worker Protection

Workers who entered the work area during cleaning activities wore disposable protective clothing (Tyvek suits) and proper respiratory protection including ½ face respirators air purifying respirators with High Efficient Particulate Air (HEPA) filters.

Decontamination

Workers performed proper decontamination upon exiting each work area by:

- Removing and disposing of protective clothing.
- Removing and Rinsing respirator.
- Showering.
- Donning street clothing.

Disposal

Action placed ~~asbestos-containing~~ waste material in doubled and labeled impermeable plastic bags and transported them to an enclosed polyethylene sheeting lined dumpsters for pickup and disposal.

AIR MONITORING

Sample Collection

ATC collected samples of air on 25 millimeter, mixed-cellulose ester filter membranes (0.45 micron pores) contained in manufacturer pre-assembled, three-piece cassettes with electrically conductive, extended cowls. Pump flow rates were determined (both at the start and at the end of the sampling period and periodically by a representative of the NYCDEP) with a secondary standard (rotameter) that is calibrated quarterly against a primary standard (Gilian Instrument Corporation primary flow calibrator "Giliberator"). Fibers from ambient air were collected with the filter cassette open-faced and positioned between three to five feet above the floor.

Sample Analysis

PCM ambient and clearance samples were analyzed by ATC's New York City laboratory utilizing the PCM method of analysis. The microscope used for sample analysis was equipped with a phase contrast condenser. Sizing and fiber counts were performed at 400X magnification. Samples were analyzed by the National Institute of Occupation Safety and Health (NIOSH) Method 7400 using method "A" counting rules. Method "A" rules count only those fibers that have a length greater than five microns and a length-to-width ratio greater than three-to-one. All air sample results are reported in fibers per cubic centimeter of air (f/cc).

TEM ambient air samples were analyzed by ATC's New York City laboratory under strict AHERA protocol. TEM with Energy Dispersive X-ray analysis (EDX) involves subjecting the prepared filter media to a stream of electrons. The returning diffraction pattern is a signature for the elemental composition of the material. This allows for precise asbestos quantification.

Quality Assurance

Analysis was performed by personnel who have completed the NIOSH 582 Sampling and Evaluating Airborne Asbestos Dust course or an equivalent course.

Personnel also participate in the NIOSH/AIHA (American Industrial Hygiene Association) Proficiency Analytical Testing (PAT) Program to ensure consistency in methodology. All laboratory technicians involved in air sample analysis have received applicable EPA training.

Air Sample Results

Final air clearance samples reported concentrations of airborne fibers less than the concentrations required by the EPA for this project. The attached appendices contain all laboratory analysis information.

WIPE SAMPLING

The wipe 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.

There are no established regulatory values for these analytes on surfaces.

Wipe Sample Results

Background and clearance wipe sampling was performed consistent with generally accepted industrial hygiene practices. There were inherent limitations created by operational and work practice variability, variations in contaminant concentrations, and sampling and analytical accuracy. All acceptable results of the sampling represent conditions found on the dates the samples were collected. Individual analytes specified herein were analyzed in accordance with the project specifications utilizing the following analytical procedures:

- Lead, EPA Method SW-846-6010B
- PAHs, ASTM-6661-01, EPA Method SW-846-8270C
- Dioxin, ASTM-6661-01, EPA Method SW-846-8290
- Mercury, EPA Method SW-846-7471A

CONCLUSIONS

Based on project oversight, including results of air sampling and wipe sampling data collected, it is the professional opinion of ATC that all cleaning at 125 Cedar Street, New York, New York was conducted in accordance with the project manual as well as all applicable federal, state and local asbestos regulations. All ambient and final air clearance and wipe sample results were found to have a concentration satisfactory to achieve the acceptable criteria established by the NYCDEP and EPA standards for re-occupancy following cleaning activities.

Our professional services have been performed, our findings obtained and our recommendations prepared in accordance with customary principles and practices in the field of environmental science and engineering in this region. This statement is in lieu of other statements either expressed or implied. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

This report is intended for the sole use of the NYCDEP and USEPA. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the

needs of other users, and use or re-use of this document or the findings, conclusions, or recommendations, is at risk of said user.

ATC ASSOCIATES INC.

Benjamin M. Sallemi
Senior Project Manager

APPENDIX A - DAILY FIELD REPORTS

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APPENDIX B - TEM AIR SAMPLE RESULTS DURING CLEANING

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APPENDIX C- TEM FINAL AIR SAMPLE RESULTS

APPENDIX D - FIBERGLASS FINAL AIR SAMPLING RESULTS

APPENDIX E - PRE & POST LEAD WIPE SAMPLING

APPENDIX F - PRE & POST PAH WIPE SAMPLING

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