

Response to Regulator Comments (Reports): September 8, 2006

Black = Regulator Comment Red = Response

**Preliminary
Environmental Characterization Report
Current Conditions at Fiterman Hall
30 West Broadway
New York, New York
Dated January 10, 2006**

Report Update:

1. Discussion of waste characterization test results that were unavailable at the time of the previous submission has been added to Sections 4.7 and 5.7.
2. The asbestos survey has been updated to include investigative activities conducted subsequent to the previous submittal.

Specific Responses:

Sections 1.0 Executive Summary - Exterior Façade & 5.3 Exterior Dust Investigation

1. This section states that cleaning of the lower two floors where urban background road dust has accumulated will be conducted, and focused cleaning of limited façade components that exhibit residual dust will be conducted as a part of the remediation/deconstruction project. This statement appears to contradict the January 10, 2006 Preliminary Façade Characterization Report. The façade report states that only portions of the second floor would be cleaned, that the gash area would be cleaned, and it does not mention any “focused cleaning of limited façade components”. Please clarify exactly what portions/areas of the exterior of the building will be subject to cleaning and ensure that the language in all of the plans/reports is consistent.

As discussed in *Regulatory Submittal Part I(S) -Scaffold Work Plan* Sections 6.8 and 6.11, a careful visual inspection will be conducted as the exterior scaffolding is erected. At the direction of the site hygienist, the contractor will conduct HEPA-vacuuming and wet-wiping of any façade components that require cleaning. This is in addition to the first floor, second floor, and gash area, which will be cleaned in their entirety. Sections 1.0 and 5.3 of *The Preliminary Environmental Characterization Report* and Section 4.1 of the *Preliminary Façade Characterization Report* have been edited for clarity.

Sections 1.0 Executive Summary - Lead-Based Paint & 5.5 Lead-Based Paint Survey

2. This section states that lead-painted materials remain in the facility. Details should be provided on how these materials will be abated and removed during the project.

XRF testing confirmed the positive presence of lead based paint on one metal fender post located in the loading dock of the building, one ceramic sink in the basement and a portion

of a plaster-covered column on the 4th floor. Details on the removal and disposal of these items will be presented in *Regulatory Submittal Part I - Work Plan*.

Section 1.0 Executive Summary - Microbiological Contamination

3. This section states that limited visible mold exists in the building. How does Airtek plan to deal with the mold for this project? The plan does not provide any information on the manner in which mold and bacterial contamination will be addressed. Such information should be included.

Mold contaminated materials will be disposed of during the gut strip operations, while the work areas are under negative pressure. Mold spores are controlled with particulate engineering controls, which are the primary controls to be utilized for all remediation phase interior work. PPE for mold abatement is likewise the same as is proposed for this project, so the existence of mold has no practical impact on either engineering controls or personal protection components of the plans. Sections 4.8 and 5.8 have been edited. Reference to mold spore control has been added to *Regulatory Submittal Part I - Work Plan*.

Section 5.4 Asbestos Containing Materials Survey

4. This section discusses window caulk on stair bulkhead windows. It is unclear if this category of caulking will be included in the PCB sampling discussed in Section 4.5 of Part IV. Please clarify.

Window caulking on stair bulkhead windows will be tested for total PCBs. Section 5.4 of the report has been edited for clarity. The results of the PCB testing will be discussed in *Regulatory Submittal Part IV – Waste Sampling and Management Plan*.

**Preliminary Façade Characterization Report
Remediation and Deconstruction of
Fiterman Hall, 30 West Broadway,
New York, New York Dated January 10, 2006**

Report Update:

1. Potential WTC impact to interstitial spaces in the façade at the gash area are now discussed in Sections 3.6 and 4.3. A Pilot Program to investigate this condition and the potential impact of the assumed contamination is proposed in *Regulatory Submittal Part I(S) – Scaffold Work Plan*, and additional air monitoring to be conducted to confirm the effectiveness of those procedures is addressed in *Regulatory Submittal Part II – ECAMP*.

Specific Responses:

General Comment:

1. The Work Plan, and the Environmental and Facade Characterization Reports have not indicated whether contaminants are present on the building roof. Please clarify. This information is needed to determine the adequacy of proposed air sampling locations in relation to any abatement work that may be needed on the rooftop and/or during exterior abatement activities.

Airtek's waste characterization sampling of the roof ballast fines on September 29, 2005 indicates that the fines are not regulated under RCRA. Based on conversations with the regulators, the ballast will be assumed contaminated and subject to cleaning. After cleaning and visual inspection the ballast stone will be disposed as unregulated waste. The ballast fines and any cleaning materials will be tested for waste characterization and disposed as ACM at a minimum, and according to the results of the waste characterization testing. The cleaning water will be tested for waste characterization and for NYC DEP Sewer discharge criteria. If the water does not exceed RCRA or NYC DEP limits, it will be filtered through a five-micron filter and disposed to the NYC sewer. If the water tests above the RCRA or NYC DEP limits, it will be disposed in accordance with the test results. Sections 4.7 and 5.7 and the Executive Summary of the Environmental Characterization Report have been edited to address this. *Regulatory Submittal Part I – Work Plan* includes information on the proposed handling of the roof ballast.

Section 2.3 Façade Visual Inspection

2. This section states that a floor-by-floor, façade-by-façade inspection was conducted by an investigation team that included "USEPA Lead Inspectors". Please clarify what is meant by "USEPA Lead Inspectors". EPA personnel were not part of any "floor-by-floor, façade-by-façade inspection" conducted by the owners of the building.

USEPA is the certifying entity for Lead Inspectors in New York State. For clarity, the report has been revised to read, "USEPA-certified Lead Inspectors."

Section 2.6 WTC COPC Impact Investigation Contaminants of Potential Concern

3. This section makes reference to the following document, World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks (May 2003). Since Airtek has made reference to this document it

should be clarified in this section that the COPCs noted in the referenced document were asbestos, MMVF, silica, dioxin, PAH, and lead. Please revise this section.

Section 2.6 has been edited. Section 4.2 (Personal Exposure Testing) of the *Preliminary Environmental Characterization Report* also references the WTC Indoor Environmental Assessment document, and has been edited.

Section 3.3 Façade Visual Inspection – Debris

4. This section states that very little debris exists on the façade of the lower floors and that isolated locations where debris remains have been identified for focused cleaning including the gash area, specified areas of the second floor, and the entire first floor façade.

- (a) Please clarify exactly what portions of the second floor will be subject to a focused cleaning after a thorough visual inspection is conducted of the entire façade of the building.

The entire first and second floors, and the gash area will be subject to HEPA-vacuuuming and wet wiping. A visual inspection will be conducted by the site hygienist as the scaffold is erected. If additional areas of the façade above the second floor and outside the gash area are observed to merit cleaning, further cleaning in those specific areas will be directed by the Owner's Environmental Consultant (EC). Section 3.3 and Section 4.1 have been edited for clarity.

- (b) Please clarify why it is limited to the second floor and below if the section states that debris exists on the façade of the lower floors. What remains and exactly where on what floors?

Please see response to comment 4(a) above.

Section 3.6 WTC COPC Impact Inspection – Surface Impact

5. This section states that the highest level of lead dust detected above the ground floor was 8.18 ug/ft². This statement does not seem to be consistent with the sample results attached to the Preliminary Façade Characterization Report. The attachments state that the façade above the 5th floor had a lead sample result of 10.7 ug/ft² and the façade above the 14th floor had lead sample results of 71.6 ug/ft² and 136 ug/ft². Please clarify.

The EPA comment is correct. Section 3.6 of the report included a review of the façade **lead** wipe tests conducted according to NIOSH 9100 and analyzed by Flame AA, which are the appropriate methodologies to reference to the HUD guidelines. The **metals** wipe samples collected according to the NIOSH 9100, but analyzed by ICP/MS, were not originally compared to the HUD guidelines. Section 3.6 has been edited to discuss these results as well. The base conclusion (that the façade was effectively cleaned by the NYC DEP Exterior Cleaning Program in 2002) is not impacted.

Section 4.1 WTC Dust Impact - Exterior Cleaning Requirements

6. This section states that portions of the second floor must be subject to focused cleaning. Please clarify exactly what portions of the second floor will be subject to a focused cleaning after a thorough visual inspection is conducted of the entire façade of the building. Details on how these areas will be cleaned should be provided.

Please see the response to comment 4(a) above. Section 4.1 has been edited for clarity and consistency. Details on the cleaning to be conducted are provided in *Regulatory Submittal Part I(S) – Scaffold Work Plan*, Section 6.8 and 6.11.

7. This section states that the focused cleaning will allow the erection of the project exterior scaffold to be delayed until the scaffold is needed for deconstruction work. It is unclear what Airtek is implying with this sentence. Please revise the section to provide clarity.

Due to recent changes in the schedule of the deconstruction of the building, the scaffolding erection will be among the first site activities. The noted statement has been deleted from Section 4.1 of the report.

Section 4.2 Façade Integrity

8. This section states that the window systems are in excellent condition and are a serviceable barrier for use during the abatement. This section further states that the installation of plywood/plastic critical barriers over the windows is not necessary to carry out the remediation of the building. Please confirm if there are any breached windows towards the southern end of the building. Airtek should ensure that if there are any breaches/openings in any of the windows or an opening exists in the façade that critical barriers are properly installed prior to the commencement of any interior abatement work.

The gash area had several windows that were breached but have been covered by plywood barriers. This plywood is sealed with caulking at the edges and on the inside of the broken window. Airtek will ensure that any and all openings or breaches are properly sealed prior to the commencement of interior abatement work. Section 4.2 has been edited to include reference to the inspection and sealing of communicating openings. Likewise, reference to this activity has been included in *Regulatory Submittal Part I(S) – Scaffold Work Plan*, Section 6.0.

Section 4.3 WTC Dust Impact – Façade Components

9. This section states that build-up of urban road dust on the ground floor and isolated pockets of WTC debris will be subject to focused cleaning. Please provide specific details on exactly what areas of the building’s façade will be cleaned.

Please see response to comment 4(a) above.

10. This section states the following, “The gash area will be cleaned from the slabs themselves.” Please provide clarity on this statement and the approach to be taken for the gash area since the gash area consists of other elements besides slabs that will need to be cleaned (e.g., steel beams, current netting, etc.). Please clarify in detail what is being defined as the “gash area.”

The intent of the statement was to indicate that the slabs in the gash area are accessible and can be used as a platform from which to work to do the cleaning of all gash area components. Section 4.3 has been edited to clarify this, and a description of the extent of the gash area has been included in section 4.2.

PAL Responses (Red) to:

EPA comments on:

**Regulatory Submittal Part I - Work Plan
Remediation and Deconstruction of
Fiterman Hall – 30 West Broadway
New York, New York
Dated January 10, 2006**

General Comments

1. Reference is made to various plans that will be submitted at a later date by the contractor(s) awarded the contract(s) for this project. It would be beneficial for the owner to provide the regulators with as much detail as possible on all aspects of the project at this stage of the process, as opposed to a later date, to minimize any delays on the initiation of the project since the regulators will need additional time to review any supplemental information provided. EPA reserves its right to comment on these subsequent documents and reserves its right to make additional comments on the preliminary documents dated January 10, 2006 submitted by Airtek for the owner.

Regulatory Submittal Part I(S) - SEO Work Plan is being submitted at this time to allow the erection of scaffolding to facilitate work at the site. This work will be exterior to the building envelope and not cause disturbance of materials inside the building. It is not possible to provide details of the entire project at this time since the deconstruction subcontractor has not yet been selected.

2. It is recommended that an Asbestos and COPC Abatement Plan be developed for this project. Information including, but not limited to, the installation of exterior hoist(s) or crane(s), the installation of scaffolding and tie-ins, the movement of containers within the building to and from storage areas and/or loading areas, and the types of containers/bags, etc. to be used to transport waste streams from the containment areas should be provided.

Refer to revised Regulatory Submittal Part I(S) - SEO Work Plan Section 6.0 on page 7 which addresses abatement pertaining to the SEO Work Plan.

3. The “Deconstruction Phase” is not defined in Part I. There is a Section titled, “Conventional Building Demolition.” If this is considered the “Deconstruction Phase” all submissions referencing both terms should be revised to provide clarity.

Not applicable to SEO.

4. Under what phase will the scaffolding and netting occur. Details should be provided.

The scaffolding erection operation, netting removal and new netting installation will occur as the 1st Phase of the project. Refer to revised Regulatory Submittal Part I(S) - SEO Work Plan Section 6.0 on page 7.

Section 2.4 Regulatory Submittal Part III – Preliminary Health & Safety Plan

5. This section states that a preliminary Health and Safety Plan (HASP) is included as Part III of the submittal package and that the contractor awarded the contract for the project will finalize the HASP. Airtek should provide specific details on what additional

information will need to be incorporated into the final HASP that is not already in the preliminary HASP.

The DASNY/CUNY HASP was intended for use up until the point that a contractor took control of the site (through the Investigation Phase).

See revised Regulatory Submittal Part III(S)-Health and Safety Plan.

This revised HASP is intended for use by all site personnel and visitors (excluding regulators who will comply with their own HASP) during the SEO work.

Section 3.3 NYS DOL Variance Applications

6. Reference is made to a “Contractor’s work plan”. What will this work plan entail and when will it be submitted?

See revised Regulatory Submittal Part I(S) - SEO Work Plan which is being submitted at this time.

Section 4.5 Elevator Service

7. This section discusses Airtek’s *Re-opening Request for Variance 05-0919, 11/14/05*. Please be cognizant that EPA and DOL have already provided comments on the re-opening request. Revisions should be made to this section based on the initial comments provided on the re-opening request.

Not applicable to SEO. This comment does not refer to Section 4.5. Refer to revised Regulatory Submittal Part I(S) – SEO Work Plan Section 4.5 on page 6.

Section 5.2 Work Area Monitoring

8. What is Airtek defining as “project monitoring”?

The intent was to refer to “work area monitoring,” and the term has been changed in Section 5.2 on page 6. Work area monitoring is defined in the ECAMP and the ECAMP QAPP as the “asbestos abatement containment monitoring” required by ICR 56 as distinct from the “community monitoring” around the perimeter of the site.

9. This section states that project monitoring and asbestos air sampling will be conducted throughout the Remediation Phase of the Project. Community air monitoring needs to be conducted for all phases of the project: the remediation phase, the deconstruction phase, and the installation of scaffolding and any netting. Part I should be revised for clarity.

Refer to revised Regulatory Submittal Part I(S) - SEO Work Plan Section 2.3 on page 3.

Section 6.1 Operation I – Clean Zone Decontamination & Clearance

10. The figures attached to Part I do not indicate where the three zones (Clean Zone 1, 2, and 3) are designated. Please clarify.

Not applicable to SEO. It will not be necessary to establish interior Clean Zones since no personnel will enter the Building during SEO.

Section 6.6 Operation VI – Work Area Clearance

11. This section states that the site will be considered ready for the “conventional Deconstruction Phase” after interior air clearance sampling. A “conventional Deconstruction Phase” is not defined. Please provide clarity.

Not applicable to SEO. Separate Work Plan will be submitted for Deconstruction Phase.

12. This section states that a detailed work area clearance protocol will be developed in conjunction with the final Work Plan to be submitted by the Contractor. Airtek should provide specific details on what additional information will need to be incorporated into the final work area clearance protocol that is not already specified in Part I. What will the “final Work Plan” entail and when will it be submitted.

Clearance protocol for the SEO is only applicable to the Pilot Program outlined in revised Regulatory Submittal Part I(S) - SEO Work Plan Section 6.4 on page 9. Clearance protocol for the Abatement and Remediation Phase and Deconstruction Phase will be submitted separately.

Section 7.1 Permits

13. This section states that the contractor will obtain MTA and LMCCC approvals of the deconstruction plan. What is the timeframe for submitting the deconstruction plan to the MTA and LMCCC for comment and review? If comments provided by the MTA and/or LMCCC will impact the engineering controls specified in the plans to ensure that safeguards for the prevention of releases into the environment of hazardous substances and contaminants are employed, the regulators will need another opportunity to review the plans modified to incorporate their comments before the commencement of work.

Regulatory Submittal Part I(S) - SEO Work Plan Attachment IV – Logistics Plan will be submitted at this time to MTA and LMCCC. This will allow for any comments received from MTA and LMCCC to be incorporated into the plan along with EPA comments and be submitted for approvals before the commencement of SEO work. Deconstruction procedures are not applicable to SEO.

Section 7.3 Scaffolding

14. Reference is made to a structural engineer’s *Deconstruction and Scaffold Layout Plan*. This plan was not submitted. Please provide details.

Reference to Deconstruction and Scaffold Layout Plan removed. Refer to revised Regulatory Submittal Part I(S) - SEO Work Plan Section 6.8 on page 13 and Attachment V for details regarding scaffolding installation specifications.

Section 7.5 Demolition Sequence

15. This section gives the impression that elevators and utility areas will be handled after the remediation phase. How can contaminated elevator shafts and utility areas be properly cleaned and their respective areas cleared if Airtek proposes to conduct these activities after the removal of containment and critical barriers?

Not applicable to SEO.

16. This section states that the contractor will deconstruct the building in the sequence described in their work plan. Information on the sequencing of the work should be

provided to understand the steps to be taken.

Not applicable to SEO.

17. This section states that as each floor is deconstructed, material will be pushed down abandoned shafts and dropped to the cellar level. No information is provided on what shafts, on what floors, or what materials are planned to be dropped in these shafts and how using such a method to transport materials to the ground level will be properly controlled. Details must be provided.

Not applicable to SEO.

Section 7.6 Waste Management – Conventional Demolition

18. The following sentence found in this section should be re-written to read as follows: “Based on the results of RCRA characteristic testing, the waste will be characterized according to any exceedances of RCRA parameters.”

Not applicable to SEO. For details on SEO waste management, refer to Regulatory Submittal Part IV(S) – SWP.

Section 7.7 Site Work

19. This section discusses removing rubble in the cellar. It is not clear if this pertains to rubble currently to be found in the cellar. If so, it would need to be handled properly under containment during the remediation phase.

Not applicable to SEO.

20. This section states that the cellar concrete slab is to be left broom clean. No detail is provided on if, and how, the concrete slab will be cleaned during the remediation phase to remove any potential dust that currently sits on the surface of the concrete slab. More details should be provided.

Not applicable to SEO.

Attachment I: Variance Applications

21. This attachment simply states that regulatory variance requests are to be determined by final contractor scope. This relevant information needs to be provided to fully understand how the waste streams will be handled for this project.

Please see Regulatory Submittal Part I(S) SEO Work Plan - Attachment II – New York State DOL Variance Petition.

Attachment II: Logistics Plans

22. Many of the figures/drawings in the attachments are difficult to read. Consequently, not all of the information noted on the figures/drawings is legible, and complete comments cannot be provided at this time due to this problem. Please submit clear and easy-to-read figures/drawings for review and comment.

See revised Regulatory Submittal Part I(S) - Attachment IV Logistics Plan. In addition, all plans have been re-formatted for legibility.

23. More specific details on how/where waste streams will be stored in the “storage area” as shown on the figure should be provided.

See revised Regulatory Submittal Part I(S) - Attachment IV Logistics Plan.

24. How does this figure correlate with Figure WS-1 in Part IV (Waste Sampling and Management Plan)? Please clarify.

See revised Regulatory Submittal Part I(S) - Attachment IV Logistics Plan and revised Regulatory Submittal Part IV(S) – Attachment B.

25. Section 6.0 (Waste Packaging and Storage) of Part IV (Waste Sampling and Management Plan) states that the locked waste storage areas will be established in the southeast corner of the first floor of the building. The figure in Attachment II seems to show that the storage area will be located in the northwest corner of the building. It also seems to conflict with the figure shown in Attachment III. Please clarify.

All waste storage will be established on the northwest corner of the Site. Refer to revised Regulatory Submittal Part I(S) - Attachment IV Logistics Plan for location of waste storage areas.

Attachment III: Remediation Phasing Plan 1-A

26. It is unclear from the figure how waste will be transported from the storage area to the loading docks. Please clarify.

Not applicable to SEO. All waste storage for SEO will be outside of the Building on the northwest corner of the Site. Refer to revised Regulatory Submittal Part I(S) - Attachment IV Logistics Plan for location of waste storage areas.

Response (red = response) to:

Regulator Comments on:

**Regulatory Submittal Part II –
Environmental Community Air Monitoring Program
Remediation and Deconstruction of
Fiterman Hall – 30 West Broadway
New York, NY
Dated January 10, 2006**

General Response:

Changes of note include:

1. The requirement for daily download and comparison of R&P TEOM reference data for PM-10 and PM-2.5 reference sampling have been added to the ECAMP Table 1, and Notes to Table 1. This requirement has also been added to the QAPP Figure 6-1, Section 10.2.10.1, and Section 10.2.9.1.
2. Work Area Sampling (Level 2) for metals and silica has been removed from the program. Community Air Monitoring for metals and silica remain included as before. Please see Section 3.3 and Table 3 of the ECAMP.
3. Scaffold Pilot Program asbestos air sampling has been added to Table 3.

Specific Responses:

Section 1.1 Operations to Be Monitored

1. This section states that the project includes “scaffold erection, six months of gut-strip contaminants of potential concern (CoPC) abatement and removal, asbestos abatement and removal under a variance from the NYS DOL, and five months of conventional deconstruction.” Please clarify if the scaffold erection is considered to be part of the “remediation phase” referenced later in the section with regards to the implementation of the community air monitoring program. The community air monitoring program should be in-place prior to the commencement of the scaffold erection. This section should be revised to indicate this fact.

Scaffold erection is part of the “Remediation Phase.” Section 1.1 has been edited for clarity. References to the complete function of the Community Air Monitoring Program and the two-week background period have been added to this section.

2. What does the “remediation phase” and the “deconstruction phase” of the project encompass that is referenced in this section?

Section 1.1 has been edited for clarity.

Section 2.3 Notification:

3. “NYCDOL” should be “NYSDOL”.

Fifth line of Section 2.3 Corrected as noted. Thank you.

4. For clarity, it is recommended that these sections be re-written to indicate that EPA, NYCDEP, and NYSDOL will be notified of any exceedance.

NYCDEP and NYSDOL have been included as being notified in the event of exceedances in Section 2.3, Section 5.2, and Section 5.3.

Section 3.2 Community Air Monitoring

5. This section states that community monitoring locations will be determined in cooperation with the USEPA, and will be identified on a drawing to be included in Attachment C (Monitoring Locations) to this specification. The January 10, 2006 version of this plan already includes a drawing. This drawing and Table 1 (Community Air Monitoring) will need to be revised after a discussion occurs with the regulatory agencies on the location of, and number of, air monitoring stations.

The ECAMP, Attachment C to the ECMAP, and the ECAMP QAPP have been edited to include the EPA requirement for eight community monitoring stations.

6. This section states that background community air monitoring will be conducted as detailed in *Table 1 – Community Air Monitoring* in Attachment A. Table 1 discusses real-time monitoring of gaseous mercury using a portable lumex instrument and visible dust emissions observations. Please clarify if gaseous mercury and visible dust emissions will be conducted during the background community air monitoring.

Yes, gaseous Mercury will be tested for during the background phase, and observations of local conditions including any on-site and/or off-site sources of visible emissions will be conducted and documented. Section 3.2 has been edited for clarity.

Section 4.2 Community Air Monitoring

7. This section states that initial community air monitoring locations are identified on the drawing included in Attachment A (Community Monitoring). The proper reference should be Attachment C (Community Monitoring Locations).

Referenced corrected. Thank you.

Sections 5.2 EPA Site Specific Trigger Levels & 5.3 Notification

8. These sections state that notification will be made to the USEPA Region 2 office and the NYCDEP and that work will be reinitiated once the USEPA Region 2 office has agreed (and NYS DOL during the Abatement Phase in the case of asbestos exceedances). For clarity, it is recommended that these sections be re-written to indicate that EPA, NYCDEP, and NYSDOL will be notified of any exceedance.

Sections 5.2 and 5.3 have been edited as noted.

Sections 5.2 EPA Site Specific Trigger Levels

9. Strike-out the following language from this section, “associated with the exceedance.”

Language removed as noted.

Section 5.3 Notification

10. It is recommended that the following ***bold italic*** language be added to the first sentence of this section: “The US EPA Region 2 office, NYS DOL and the NYCDEP will be notified promptly ***via phone and electronic mail*** of any exceedance of either a Target Air Quality Level or an EPA Site Specific Trigger Level and...”

Noted language added.

11. It is recommended that the following language be added to this section: “In the event that an exceedance of a USEPA Site Specific Trigger Level occurs, DASNY/CUNY shall prepare an Exceedance Summary Report, following completion of the exceedance assessment, for submission to the USEPA (and NYSDOL for asbestos exceedances only). This will be a 1-2 page report stating nature of the exceedance, causes of the exceedance and corrective actions taken if it was determined to be associated with 30 West Broadway.”

Recommended language added to Section 5.3.

12. DASNY/CUNY should be cognizant that nearby construction activities should be well documented since such activities may potentially result in project monitoring exceedances. Documentation of off-site activities may potentially avoid unnecessary stop-work delays if the exceedance assessment determines that other potential sources may have caused the exceedance. It is recommended that the site hygienist or a qualified designee fully document nearby construction activities in a daily site log.

Recommendation noted.

Section 5.4 Monitoring Data

13. This section states that all sampling results collected pursuant to this specification, in suitable electronic form, will be promptly provided to the USEPA Region 2 office weekly and exceedances will be reported as provided above. The sampling results should also be provided to the NYCDEP, NYSDEC and NYSDOL offices. This section should be re-written to state this fact.

Section 5.4 Edited as noted.

Attachment A – Table 1 – Community Air Monitoring

14. Once a QAPP is drafted, the information provided in the columns labeled, “Sample Collection Flow Rate and Duration” and “Analysis Method” in Table 1 should be consistent with the information provided in the QAPP to be submitted to the regulators for review and comment.

Table 1 is consistent with the QAPP.

Notes on Community Air Monitoring Table: Dust

15. Bullet item #2 states that the sensitivity on TEM air samples will be less than “0.002 s/cc.” The target air quality level for asbestos referenced in the plan is 0.0009 f/cc. How will Airtek meet the target air quality level if the sensitivity is at “0.002 f/cc”?

Correction made to Item #1 under “Asbestos.”

Notes on Community Air Monitoring Table: Dust

16. A heated inlet was not indicated for the Met One- E-BAMs. It is recommended that it be included to address condensable emissions.

Heated inlet has been referenced as noted. It is also noted in Section 10.2.9.2 of the QAPP.

Notes on Community Air Monitoring Table: Respirable Crystalline Silica – Metals

17. The notes for the metals state that mercury was one of the metals to be analyzed by ICP-MS. Table 1 (Community Air Monitoring) states that mercury will be analyzed by “EPA 324/1631”. Please clarify. In addition, why is Method 1631 referenced?

Mercury is not one of the metals analyzed for as part of the metals analyses. Table 1 notes have been edited. EPA Method 324 is the correct reference for total mercury in air samples for iodated carbon trap collection and analyses. Method 1631 has been deleted.

Notes on Community Air Monitoring Table: Mercury

18. This section states that at a minimum, real-time mercury readings will be taken twice a shift at the fixed air monitoring locations. However, Table 1 (Community Air Monitoring) states that real-time mercury readings will be conducted by “3 site tours per work shift”. Please clarify the discrepancy on how many times readings will be taken and please clarify what is meant by “3 site tours”.

Table 1 has been corrected to read “2 site tours per work shift.” Table note on mercury has been edited to describe the site sampling tour to be executed.

Notes on Community Air Monitoring Table: Organic Compounds (Dioxin/PCBs/PAHs)

19. It is recommended that the first and second sentences for bullet item #2 should be re-written as follows: “Organic samples will be collected at each community monitoring location once a week on a consecutive different day of the work week during the Remediation Phase and Deconstruction Phase, until all days of the work week are used and then the same schedule will be repeated until project completion. Samples from the air monitoring station with the highest 24-hour average PM₁₀ concentration (ug/m³) recorded for that day will be submitted for analysis.”

Recommended language has been added.

Attachment A - Table 2- Data Reference Levels for Community Monitoring

20. Recommend adding the following **italic** language to “Note 3” at the bottom of Table 2: “If a chromium value is in excess of the Target Air Quality Level (0.6 ug/m³), this will result in a stoppage of work; and, that sample will be speciated for chromium VI to determine that its concentration does not exceed the USEPA Site Specific Trigger Level for chromium VI (**0.6 ug/m³**), and the appropriate actions pertaining to an exceedance of the USEPA Site Specific Trigger Level **for chromium VI** will continue to be conducted.”

Noted language added.

21. Attachment D states that the QAPP is under development and will be finalized based upon the specifics of the regulators' comments on the proposed air plan. It is recommended that the QAPP follow a similar protocol as the QAPP that Airtek generated for the 133-135 Greenwich Street/21-23 Thames Street buildings.

Recommendation noted.

PAL Responses (Red) to:

**EPA Comments on:
Regulatory Submittal Part III
Health & Safety Plan
Remediation and Deconstruction of
Fiterman Hall – 30 West Broadway
New York, New York
Dated January 10, 2006**

General Comment

1. Parts I, II, and IV make reference to a “remediation phase” and a “deconstruction phase” while Part III (i.e., the Health and Safety Plan (HASP)) makes reference to these two phases and an additional phase, the “abatement phase.” Please clarify how many phases are there for this project, what do each of them entail, and ensure that the same nomenclature is used in Parts I through IV for these phases.

Please refer to Section 1.0 on page 6 of Regulatory Submittal Part III(S) – HASP

There will be two phases of work.

Remediation Phase: Scaffolding Erection Operation, and Abatement of asbestos and remediation of CoPC throughout the Building including the removal of all interior building components and materials.

Deconstruction Phase: Demolition of remaining building structure.

Contacts/Emergency Telephone Numbers

2. It is recommended that local emergency telephone numbers (e.g., hospital(s), fire, police, etc.) be added to the list.

Emergency telephone numbers added. Please refer to Section 17.6 Emergency Plan-Reporting Emergencies on Page 47 of Regulatory Submittal Part III(S) – HASP.

Emergency Services:

Hospital: NYU Downtown Hospital
170 William Street
New York, NY 10038
Phone: (212) 312-5000

Police: 1st Precinct
16 Ericsson Place
New York, NY 10013
Phone: (212) 334-0611

Fire: Engine 7, Ladder 1, Battalion 1
100 Duane Street
New York, NY 10007
Phone: (212) 628-2900

3. The correct spelling for the NYCDOB contact is “Iulo”. Please revise the list.

Corrected. See Contact List on Page 5 of Regulatory Submittal Part III(S) – HASP.

4. A point of contact for NYSDEC and OSHA should be added to the list.

Added. See Contact List on Page 5 of Regulatory Submittal Part III(S) – HASP.

5. The list should be updated once the contractor is on-board.

Contact List updated. See PAL Environmental Safety Corp. contact list on Page 5 of Regulatory Submittal Part III(S) – HASP.

6. The alternate Contractor Safety Officer should be added to the list as well.

Not applicable to SEO.

Emergency Plan – Building Evacuation

7. This section states the following: “All personnel working in the potentially impacted areas shall be given the opportunity to read this section of the Health and Safety Plan (HASP). The remainder of the attached HASP will be implemented as conditions allow.” Please clarify what Airtek is stating for this portion of the section.

All personnel working on the SEO shall be required to read the Health and Safety Plan (HASP) in its entirety prior to commencing SEO activities. Personnel are required to adhere to the HASP at all times while on Site. Refer to Section 1.0 on page 6 of Regulatory Submittal Part III(S) – HASP.

8. It is unclear why items A through D pertain solely to a building evacuation. Please clarify.

HASP revised for clarity. Items A through D do not solely pertain to a building evacuation but are items of concern to be complied with during SEO. These items are covered during orientation of personnel. Please refer to Section 5.1 on Page 21 of Regulatory Submittal Part III(S) – HASP.

9. It is recommended that a figure showing the designated assembly area and the route for personnel to get to it from the building be included.

Map of assembly areas is included with Regulatory Submittal Part III(S) – HASP. Refer to Attachment 6

10. More detail should be provided on the procedures to be taken before personnel are allowed to leave the designated assembly area and before re-entry is allowed into the building.

Building reentry procedures following an evacuation have been added. Please refer to Emergency Plan, Section A, Item 6 on Page 46 of Regulatory Submittal Part III(S) – HASP.

11. Details should be provided on how a building evacuation will be communicated to personnel within the building.

Warning system details have been added. Please refer to Section 6.3 Emergency Warning on page 26 of Regulatory Submittal Part III(S) – HASP.

Section 1.0 Scope of Plan

12. Strike-out the second paragraph from this section.

Second paragraph has been removed from the Regulatory Submittal Part III(S) – HASP.

13. Other portions of Airtek’s submission indicated that the contractors would be generating their own HASPs. However, this section states that this HASP is for use by DASNY/CUNY and their designated contractors and consultants. Please clarify.

The DASNY/CUNY HASP was intended for use up until the point that a contractor took control of the site (through the Investigation Phase). Regulatory Submittal Part III(S) – HASP is intended for use by all site personnel and visitors after the contractor takes control of the site for SEO.

Section 4.3.2 Emergency Medical Treatment

14. The last bullet item of this section discusses evacuation routes. However, no figures showing the evacuation routes have been provided in the HASP. It is recommended that the evacuation route figures/maps be added to the HASP.

Map of evacuation route is included with Regulatory Submittal Part III(S) – HASP. Refer to Attachment 6.

Section 4.3.3 Medical Response Equipment

15. Airtek should ensure that the HASP is amended to indicate the locations of the equipment stations once they have been determined by the CSO at the site.

Section revised. Refer to Section 4.3.2 Medical Response Equipment on page 16 of Regulatory Submittal Part III(S) – HASP. The words “The locations of first aid kits will be in 1) SEO decontamination unit, 2) administrative trailer located on the northwest side of the Site and 3) each SEO work area.” have been added.

Figure 5.2 Fiterman Hall Remediation and Deconstruction Sample Subcontractor Site Safety Plan

16. The title for this figure implies there is a subcontractor plan. Please clarify.

Section deleted. All subcontractors will be required to adopt Regulatory Submittal Part III(S) – HASP.

Section 7.3.1 Chemical Action Levels

17. This section states that Figure 7-1 lists the OSHA PEL, site specific Action Level, and trigger levels. Figure 7-1 does not show “trigger levels”. Please clarify what is meant by this term and “site specific action level” in the HASP.

Section revised. Refer to Section 7.3.1 on page 27 of Regulatory Submittal Part III(S) – HASP. The words “trigger levels” and “site specific” have been deleted.

Section 8.1 Engineering Controls

18. Please clarify if torching activities will be conducted in the exclusion zone during the asbestos and COPCs abatement activities for the project. EPA understands that the city and state regulators would allow the use of torches in only limited circumstances during an asbestos abatement project. Clarity and specifications are needed on the use of torches, where will they be used, what type of torches, etc.

Torches will not be utilized during the SEO.

Section 16.0 Emergency Response

19. Please clarify in the HASP how the following unplanned events will be handled for the project: (1) unplanned, sudden, or non-sudden release of hazardous waste or constituents; and (2) falling or dropped building debris.

Section revised. Refer to Section 17.1 and 17.2 of Regulatory Submittal Part III(S) – HASP. Sections have been added addressing “(1) unplanned, sudden, or non-sudden release of hazardous waste or constituents; and (2) falling or dropped building debris.

Section 16.3 Structural Failure

20. Please clarify if, and when, a building evacuation would occur due to a structural failure.

Immediately upon notification of structural failure the CSO would assess the situation and coordinate Building evacuation. Refer to Section 17.5 on page 44 of Regulatory Submittal Part III(S) – HASP.

21. Please clarify if, and when, work stoppage would occur in a certain area due to a structural failure and what actions would be taken before work was allowed to be re-initiated in these areas.

Immediately upon notification of structural failure the CSO would assess the situation and coordinate building evacuation. Dependant on the nature of the emergency a decision will be made by the CSO based upon recommendations from DASNY/CUNY, their engineer, environmental consultants and First Responders before work would be re-initiated. Refer to Section 17.5 on page 44 of Regulatory Submittal Part III(S) – HASP.

Attachment 3 Worker Hygiene and Protection

22. Many of the items seem to be duplicated within the attachment. Please clarify.

This attachment was designed to assist personnel and visitors not familiar with the use of decontamination facilities without requiring them to search the entire HASP to find the required procedures. A copy of Attachment 3 will be posted by the entrance of the SEO decontamination facility.

Response to Regulator Comments (Waste Plan) with Relevance to Scaffold Erection Operation: September 15, 2006

This response is intended to accompany *Regulatory Submittal Part VI(S) – Scaffold Waste Plan*.

Notation “N/A-Scaffold” indicates that the comment does not apply to the scaffold erection operation (SEO), and that the comment will be addressed in the subsequent submittal of *Regulatory Submittal Part IV – Waste Sampling and Management Plan*.

Red = Response

**Regulatory Submittal Part IV
Waste Sampling and Management Plan
Remediation and Deconstruction of
Fiterman Hall
30 West Broadway
New York, New York
Dated January 10, 2006**

Section 2.0

1. Airtek should indicate which of the anticipated waste streams described in this section are considered porous materials and which are considered non-porous materials. The waste sampling and management approach for the porous and non-porous materials should be clearly defined in Part IV.

Fascia brick and mortar removed within the tents of the Pilot Program will be treated as ACM waste. If the Pilot Program results confirm there is no airborne ACM impact from brick removal, and if no residual WTC dust is observed, fascia brick and mortar removed subsequent to the Pilot program will be treated as C&D waste. All other waste materials produced by the Scaffolding Erection Operation (SEO) will be treated as ACM at a minimum, and according to any waste characterization testing conducted in the case of suspect regulated materials. This is further discussed in *Regulatory Submittal Part I(S) – Scaffold Work Plan* and is referenced in Section 3.2 of *Regulatory Submittal Part IV(S) – Scaffold Waste Sampling and Management Plan*.

2. Part IV should state that all porous materials will be disposed of as asbestos waste at a minimum and managed and disposed of according to the results of the waste classification sampling.

N/A – Scaffold.

3. Part IV should discuss the waste sampling and management approach to be taken with the exterior mesh/netting currently on the building.

The exterior netting was sampled for RCRA waste Characterization. The netting is not RCRA-regulated. Part IV(S) Section 3.1.3 has been edited to include this information. Results of the testing are included in Attachment D.

4. Part IV should discuss the waste sampling and management approach to be taken with any sprayed-on fireproofing, if it was used in the building.

N/A – Scaffold.

Section 2.1

5. Remove “Regulated” from title of Section 2.1.

The word “Regulated” has been removed from the title of Section 2.1.

6. Only Section 2.1 mentions “lead-painted building materials.” Part IV should discuss the waste sampling and management approach to be taken for this waste stream as was done for the other waste streams specified in Part IV.

N/A – Scaffold.

Section 2.2

7. Wash-down water/liquids should be noted as a waste stream category in this section, and any other relevant section of Part IV. Part IV should describe how wash-down water/liquids will be collected, contained, characterized, stored, and disposed of depending on its sampling results.

Façade washing is intended to be wet-wiping with HEPA vacuuming, and not a pressure wash-down. One purpose of wet-wiping is to limit the amount of free liquid created by the cleaning process. Cleaning liquids are discussed in Part IV(S) Section 4.2.3, and in Part I(S) Section 6.0.

Section 2.3

8. Part IV discusses two phases, a remediation phase and a deconstruction phase. Part IV states that the remediation phase of the project includes the removal of all interior surfaces and non-structural elements within the building, and the cleaning and encapsulation of all remaining structural elements under containment while the deconstruction phase entails the deconstruction of the remaining cleaned and encapsulated structural concrete and steel components, and the steel and masonry façade. However, the materials specified under Section 2.3 titled “Deconstruction Waste” imply that these materials will be removed during the deconstruction phase. In fact, based on the definition of the two phases to be conducted for this project, these materials will be dealt with during the remediation phase. This section needs to be clarified or the title re-written to clarify that these materials will be handled during the remediation phase, or alternatively, a distinction should be made about what materials will be handled under each phase.

N/A – Scaffold.

9. It is recommended that either Section 2.3 or Section 2.6, and any appropriate subsequent sections of Part IV, include the proper handling and final disposal of lead-sheathed electrical wiring and mercury-containing electrical switches.

N/A – Scaffold.

10. Elevators should be added to the list of deconstruction waste streams.

N/A – Scaffold.

Section 2.5

11. It is recommended that the following ***bold italic*** language be added to the following sentence: “The category may include fluorescent lighting ballasts ***and potting*** material and caulking products.”

N/A – Scaffold.

12. It is recommended that the following language be added to this section: “If 50 ppm or more PCBs are detected in the waste stream the materials will be classified as both federal Toxic Substances Control Act (TSCA) waste and New York State hazardous waste.”

Suggested Language has been added to Section 4.3 of Part IV(S).

Section 2.6

13. This section indicates that a variety of construction materials are cataloged in Attachment A (Building Contents Inventory & Chemical Log). Attachment A does not detail any construction materials, but only discusses chemicals found throughout the building. Construction materials (e.g., saws, drills, etc.) should be defined in Part IV and the waste sampling and management approach for this waste stream should be described in Part IV.

N/A – Scaffold.

Section 2.8

14. This section states that the interior materials will have been decontaminated as part of the Remediation Phase. This implies that the interior materials will remain in the building at the end of the Remediation Phase and will be removed during the Deconstruction Phase. It is our understanding that all of the interior materials will be removed and disposed of properly during the Remediation Phase and only the structural shell will remain for the Deconstruction Phase. Please clarify.

N/A – Scaffold.

15. Please clarify if the windows in the building are of the type that was manufactured with selenium as an ingredient to reduce solar heat.

N/A – Scaffold.

Section 3.0

16. Strike-out “i.e., the Deconstruction Waste listed in subsection 2.3 above” in the first bullet item and replace with “e.g., the Deconstruction Waste listed in subsection 2.3, ACBMs noted in subsection 2.1, and miscellaneous contents noted in subsection 2.6.”

N/A – Scaffold.

17. Recommend replacing “deconstruction waste” with “waste material” in the second bullet item.

N/A – Scaffold.

18. It is recommended that the following ***bold italic*** language be added to the third bullet item: “Where analytical results indicate that dust in a portion of the building is classified as

a particular category of regulated waste, then dust-impacted materials in that portion of the building will be likewise classified *as that particular category of regulated waste* until and unless testing indicates otherwise.

N/A – Scaffold.

19. The end of the third bullet item currently states: “...that dust-impacted materials in that portion of the building will be likewise classified until and unless testing indicates otherwise.” Please clarify in this section whether an additional phase of sampling will be conducted and, if so, where the sampling scheme for this subsequent sampling can be found in Part IV.

N/A – Scaffold.

20. It is recommended that the following *bold italic* language be added to this sentence since this section states that the dust will be sampled for total PCBs: “Any material suspected *of being* hazardous waste or *another* RCRA-regulated *or TSCA-regulated* waste will be tested and evaluated based on its composition.”

N/A – Scaffold.

21. It is recommended that the first sentence of the second to last paragraph on page 7 be re-written to read: “All potentially hazardous waste will be managed as hazardous waste unless analytical results prove otherwise.”

N/A – Scaffold.

22. Please confirm if “NELAC” is the appropriate acronym to use with regard to labs accredited in NYS or if it is “ELAP (Environmental Laboratory Approval Program).”

It is ELAP, and has been corrected.

Section 4.1

23. The grab samples for dust should be representative of both porous and non-porous building materials per floor. Please clarify how Airtek plans to achieve this (e.g., certain number of grabs per porous material, per non-porous material).

N/A – Scaffold.

24. It is recommended that the following language, “a minimum of,” be added before “five grab samples.”

Recommended language has been added where appropriate in Section 4.0 of Part IV(S).

25. Please clarify the approach to be taken if a sufficient quantity of dust per floor per composite sample cannot be collected (e.g., establish an order of precedence for analyzing for RCRA characteristics).

N/A – Scaffold.

26. It is recommended that the following *bold italic* language be added to this sentence since this section states that the dust will be sampled for total PCBs: “Where analyses

indicate that the dust exceeds RCRA criteria for any one RCRA characteristic *or applicable PCB concentration*, materials potentially impacted by the dust will be assumed to exceed that specific RCRA characteristic *or PCB concentration* unless testing proves otherwise *and will be handled and disposed of according to their waste characterization results*.

N/A – Scaffold.

27. The end of this section states the following: “Details of the representative composite sampling to be conducted in response to the results of the dust characterization will be the subject of a revised WSMP to be submitted upon completion of the dust characterization study.” Specific details on the representative composite sampling for all porous and non-porous materials should be submitted with the next revised draft version of Part IV. If it needs to be revised at a later date, the owner may submit an amendment to the plan discussing the reasons for the revisions for the regulators to review.

N/A – Scaffold.

28. Please clarify if waste classification of the roof will be occurring.

N/A – Scaffold.

Section 4.2

29. Sections 4.1 and 5.0 imply that sampling for total PCBs would be conducted for waste streams. However, Section 4.2 only discusses characterizing the waste stream based on the RCRA parameters. Please clarify.

Section 3.3 of Part IV(S) has been edited for clarity.

30. This section states the following, “A minimum of three grab samples will be collected at random from 10% of the packages (bags/drums) of this class of material. Grab samples from every five packages sampled will be composited for analysis.” Please clarify the connection between these two sentences since there seems to be a disconnect between being able to composite samples from every five packages/class of material and randomly grabbing the samples from 10% of the packages.

Section 4.0 of Part IV(S) has been edited for clarity.

Section 4.3

31. It is recommended that the following *bold italic* language be added to the following sentences since this section states that the dust will be sampled for total PCBs: “Where analyses indicate that the dust exceeds RCRA criteria for any one RCRA characteristic *or applicable PCB concentration*, deconstruction waste materials potentially impacted by the dust, as determined by the Environmental Consultant will be assumed to exceed that specific RCRA characteristic *or PCB concentration* unless testing proves otherwise *and will be handled and disposed of according to their waste characterization results*.”

Within any floor of the building where dust exhibits RCRA-regulated *or TSCA-regulated* levels of contamination, representative composite sampling of deconstruction waste will be conducted. Analyses will be for only the specific RCRA characteristic *or PCB characteristic* that was noted in the dust characterization study.”

N/A – Scaffold.

32. More specific details should be provided on the representative composite sampling scheme discussed in the last paragraph and disposal options based on the results of the sampling.

Section 4.0 of Part IV(S) has been edited to provide further detail.

Section 4.5

33. Prior to containerizing ballasts, the surfaces of ballasts and the light fixtures that they are removed from should be cleaned of dust and specified in Part IV.

N/A – Scaffold.

34. Please clarify if representative samples from all caulking materials will be collected and analyzed. The characterization report seems to indicate that some sampling of caulking may have already occurred for the building. For instance, Part I states that stair bulkheads at the roof level have older windows that contain ACM caulk, and caulking related to elevators is mentioned in one of the plans. It is unclear if this category of caulking will be included in the sampling discussed in Section 4.5. It is recommended that Part IV be revised to incorporate the waste sampling and management approach to be taken for caulking materials (such as, but may not be limited to, the characterization/analytical method to be used, and final disposal options to be taken for caulking known and/or found to contain PCBs in excess of 50 ppm).

N/A – Scaffold.

Section 4.6

35. Sections 4.1 and 5.0 imply that sampling for total PCBs would be conducted for waste streams. However, the second to last paragraph of Section 4.6 only discusses characterizing the waste stream based on the RCRA parameters. Please clarify.

Section 3.3 of Part IV(S) has been edited for clarity.

36. Since Section 3.0 and 4.1 states that the dust will sampled for total PCBs, it is recommended that the following ***bold italic*** language be added to this sentence: “Materials similar in composition and WTC impact to those sampled would not be sampled for Resource Conservation and Recovery Act (RCRA) ***or PCB*** characteristics unless there is an independent concern that they might be hazardous waste due to the inherent composition of the component, subcomponent or waste stream.

Section 3.3 of Part IV(S) has been edited for clarity.

Section 4.7

37. “Cleanable” should be removed from the title of this section and Section 2.7 (and the Table of Contents) since these sections discuss managing non-porous materials that are both cleaned and not cleaned.

N/A – Scaffold.

38. Part IV does not provide specific details on how the non-porous waste streams will be managed, classified, stored, and disposed of, based on the two options provided in Section 4.7. Revise Part IV to include this information.

N/A – Scaffold.

39. What approach will be taken for non-cleaned, non-porous waste items if the dust characterization was not conclusive at the original location in the building for the specific class of material in question?

N/A – Scaffold.

Section 4.8

40. More specific details should be provided on the representative composite sampling scheme and disposal options based on the results of the sampling.

N/A – Scaffold.

41. This section indicates that the initial characterization of the structure and façade will be based on the initial dust classification sampling. It is not clear from Part IV that the initial dust classification sampling will encompass structure and façade materials. Please clarify in Part IV.

Section 4.1.4 of Part IV(S) discusses this.

42. It is recommended that the following ***bold italic*** language be added to the following sentences since the dust characterization sampling specified in Sections 3.0 and 4.1 discusses sampling for total PCBs: “Where analyses indicate that the dust exceeds RCRA criteria for any one RCRA characteristic ***or applicable PCB concentration***, structure and facade waste materials potentially impacted by the dust will be assumed to exceed that specific RCRA characteristic ***or PCB concentration*** unless testing proves otherwise.”

Section 3.3 of Part IV(S) has been edited to reference PCB testing.

Within any floor of the building where dust exhibits RCRA-regulated ***or TSCA-regulated*** levels of contamination, representative composite sampling of structure and façade waste will be conducted. Analyses will be for only the specific RCRA characteristic ***or TSCA characteristic*** that was noted in the dust characterization study.”

N/A – Scaffold.

Section 5.3

43. It is recommended that the following language be added to the end of the corrosivity section: “National Association of Corrosion Engineers (NACE) Standard TM-01-69 as standardized in SW-846 shall be utilized to evaluate corrosion rate if the suspected corrosive hazardous waste is a liquid.”

Recommended language has been added to Section 5.2.2 of Part IV(S).

Section 5.5

44. It is recommended that the following ***bold italic*** language be added to the beginning of the following sentence at the end of page 12: “The results of RCRA ***and PCB*** characteristic analyses...”

Section 3.3 of Part IV(S) has been edited to reference PCB testing.

Section 6.0

45. Please clarify where asbestos waste will be stored in Figure WS-1 of Attachment C (Waste Storage Areas).

West side of building for scaffold operation. See revised Figure WS-1.

46. Please clarify what “Phase I Waste Holding Area” pertains to in Figure WS-1 of Attachment C since the plan only discusses two phases: remediation and deconstruction.

Figure WS-1 has been edited for consistency.

47. Please identify the loading area/dock(s) on Figure WS-1 of Attachment C where waste will be transported off-site.

N/A Scaffold. Waste area will be outside building per revised WS-1.

48. Please ensure that floor drains proximate to, as well as within, the waste storage/staging areas will be sealed and isolated and note this fact in this section.

For scaffold operation, waste storage will be outside building. An inspection for sewer access proximate to the waste storage facility will be made and all access sealed per the comment. Reference to this activity has been added to Section 6.0.

49. Section 6.0 (Waste Packaging and Storage) should include a subsection which discusses the storage requirements for wash-down water/liquids.

Subsection 6.3 (Liquid Waste) has been added to of Part IV(S).

50. This section should describe the final disposal options for those material categories in Section 2.0 that are not deemed an asbestos waste, hazardous waste, universal waste, or PCB waste in Section 6.0 (e.g., C&D waste, recycled, etc.)

Subsection 6.5 (Conventional (C&D) Waste) has been added to Part IV(S).

Section 6.2

51. This section states that PPE and remediation process consumables will be stored as ACM waste at a minimum while awaiting the results of hazardous waste characterization sampling. Section 6.1 states that the storage of asbestos waste will not exceed 50 cubic yards. Are there any concerns about exceeding the 50 cubic yards storage limit for asbestos waste while the PPE and remediation process consumables is stored on-site awaiting the sampling results for the hazardous waste characterization from the lab(s)?

If more than 50 cyds. of waste will need to be stored on site, a letter of notification to the NYC Dept. of Sanitation is to be submitted that details the amount to be stored, and the location. Section 6.1 has been edited to reference this.

Sections 4.6 and 6.6.1

52. Please provide a schedule for completing the hazardous waste determination of miscellaneous items and overall generator status determination (i.e., based on generation rate).

N/A – Scaffold.

Section 6.6.1

53. This section should indicate where containerized chemicals/products that are not deemed hazardous waste will be stored within the waste storage areas and the final disposal option(s) for this waste stream.

N/A – Scaffold.

Section 6.6.2

54. Please include a discussion of potential management of spent fuels as hazardous waste (i.e., if disposed rather than recycled).

N/A – Scaffold.

Section 6.6.4

55. This section states that equipment that contains refrigerant will be HEPA vacuumed and wet-wiped before being staged in a clearly demarcated on-site area until the refrigerant has been removed by a licensed refrigerant removal service. Please clarify where such equipment will be stored while it awaits a licensed refrigerant removal service to remove the refrigerant and where it will be stored awaiting final disposal off-site. In addition, it is recommended that Attachment C (Waste Storage Areas) be revised to note the areas where this equipment will be staged and/or stored.

N/A - Scaffold

Section 8.0

56. Please clarify the two arrows facing to the south on Greenwich St. & West Broadway on the travel route figure in Attachment B since Section 6.0 states that the storage areas will be at the southeast corner of the first floor of the building.

Arrows indicate standard traffic flow of these streets.

57. If the final travel routes change from those currently proposed in Attachment B (Waste Routes) after your discussions with NYCDOT and LMCCC, please revise Attachment B as promptly as possible.

Acknowledged.

Section 9.0

58. One of the potential facilities noted in this section is, “Lead: Recyclable.” Please clarify what this means?

N/A Scaffold

59. This section states that tanks will be disposed at Republic. Please clarify since Part IV does not indicate that tanks will be used for this project.

NA/Scaffold

Section 10.0

60. It is recommended that the following language be added after the first paragraph of this section: “In New York State, PCB waste (greater than 50 parts per million PCB) is also New York State hazardous waste. Therefore, the documentation specified for hazardous waste will also apply to PCB waste. In addition, for each facility that uses/stores at any one time 45 kilograms of PCBs in containers or one or more PCB transformers or 50 or more large high- or low-voltage capacitors must develop and maintain an annual document log. If PCB transformers are present at the Building, weekly inspections must be performed and inspection logs created/maintained. Certificates of disposal must be obtained for all PCB wastes disposed and large-volume PCB waste generators must also develop and maintain an annual document log.”

N/A – Scaffold.

PAL Responses (Red) to:

OSHA Comments on:

Regulatory Submittal Part I – Work Plan:

Section 7.3 Scaffolding

3. Part I is very limited in terms of implementing worker safety & health protection. For example, the section on scaffolding (Section 7.3) discusses what might be needed, but not how to install it. More than half of the section addresses the ACM Spandrel and the NYS DOL Variance. It appears the consultant focused only on the asbestos/COPCs aspects of the project.

Details on the scaffold installation methodology have been incorporated into Regulatory Submittal Part I(S) – Scaffold Work Plan. Please refer to Section 6.1 of the Work Plan to view details of the installation procedure and to Attachment V to view an engineer’s diagram of the scaffolding tie-in.

Section 7.5 Demolition Sequence

4. This section which discusses material being “pushed down abandoned shafts and dropped to the cellar level” appears to contradict with Section 7.2 which states a “limitation on free- fall of demolition debris.”

Not applicable to SEO.

5. In addition, how will employees be protected from falling into these “abandoned shafts,” and how will employees below be protected from being struck by falling objects? Please clarify.

Not applicable to SEO.

PAL Responses (Red) to:

OSHA Comments on:

Regulatory Submittal Part III – HASP:

Emergency Plan

6. The Emergency Plan appears to deal with dust minimization, not emergency procedures. It is unclear how the following two bullet items noted for protecting workers potentially exposed to building contaminants are useful protective measures: (1) “A. 2. Avoid ingesting dust”; and, (2) “A. 3. Avoid inhaling dust”. Similarly “B.1. limit activities that promote transport of dust” is vague and unhelpful. Please clarify and explain how they relate to an “emergency plan”.

Section Revised. Refer to revised Emergency Plan Section A, Item 2 on Page 45 and Section B, Item 1 on Page 46 of Regulatory Submittal Part III(S) HASP.

7. Under the title, “Minimize Potential Public Contact” the first bullet item states, “limit access using barricades, temporary fencing, and “jersey barriers””. Is Airtek proposing to place or move emergency barriers during the scope of a building evacuation since this is under the emergency plan? The scope for a complete building evacuation is listed as a “note” on the bottom of the page. It implies that a building evacuation will occur in the case of a structural collapse. It appears that such a scenario is not the time to worry about jersey barriers. Please clarify. It also states that a building evacuation would occur for “certain power failures” which is subjective without defining the criteria. Please clarify.

Section Revised. Refer to revised Section 17.6, Emergency Plan Item C, Item 1 on Page 46 of Regulatory Submittal Part III(S) HASP. The use of “jersey barriers” would be subsequent to building evacuation and the words “re-entry to the site using “jersey barriers” if necessary” has been added.

Section Revised. Refer to revised Section 17.4 on Page 44 of Regulatory Submittal Part III(S) HASP. The paragraph “The criteria for defining the need for building evacuation in the case of “certain power failures” would be the extent or duration of the failure. An example would be that a “total power failure” may require building evacuation for the safety of the workers if a repair was not immediate.” has been added.

8. The designated assembly area is vague and should be given by cross-street, not “north of the new subway entrance”.

Section revised. Refer to Section 17.6 Emergency Plan opening paragraph on Page 45 of Regulatory Submittal Part III(S) – HASP. Also, refer to Attachment # 6 for maps of the primary and alternate assembly locations.

9. For reporting emergencies, it states that “all site personnel...shall immediately call 911”. Airtek may wish to re-word this section since it implies that all personnel on site would be attempting to contact 911.

Section revised. Please refer to Reporting Emergencies, Page 47 of Regulatory Submittal Part III(S) – HASP, the word “all” has been changed to “any”.

10. Do not believe the section titled, “D. Disposal,” is an emergency response activity.

Section revised. Please refer to Section D, Disposal on Page 47 of Regulatory Submittal Part III(S) – HASP. This section would be applicable if, in the case of an emergency, personnel have to evacuate without using proper decontamination procedures, then PPE would have to be collected and disposed of in accordance with the appropriate regulations.

Section 4.2.1 Heat Stress

11. 77 degrees is listed as the “best” temperature for rest areas. How will this be established and monitored? How was this temperature established as the “best” temperature? Please clarify.

Section revised. Please refer to Section 4.2.1 on page 13 of Regulatory Submittal Part III(S) – HASP. The references to specific temperature have been deleted.

Section 4.2.2 Cold Stress

12. The first aid for frostbite seems out of place. Why was it listed while all other injuries were not? The treatment listed includes warming for 30 minutes, but also getting “immediate medical care”. EMS should be summoned via 911, and will certainly be onsite in less than 30 minutes; otherwise the patient can be transported to the hospital identified in the HASP as being less than a mile away.

Section revised. Please refer to Section 4.2.2 on page 14 of Regulatory Submittal Part III(S) – HASP. The references to frostbite have been deleted.

Section 4.2.3 Electrical Hazards

13. Please clarify if there are any overhead power lines in the vicinity of the building. What about the building utilities? They are a far more likely source of electrical hazards during deconstruction than downed overhead power lines and electrical wires. Please clarify.

Section revised. Refer to Section 4.2.3 on page 14 of Regulatory Submittal Part III(S) – HASP. “Please note that there are no overhead power lines in the vicinity of the SEO work area” has been added.

Section 4.2.5 Overt Chemical Exposure

14. Why does Airtek believe this category of exposure warrants first aid instructions? This section is supposed to address physical hazards while chemical hazards were addressed in Section 4.1. Please clarify.

Section revised. Refer to Section 4.1.1 on page 13 of Regulatory Submittal Part III(S) – HASP. Some instructions are provided on the removal residual chemicals from the surface of the skin in order to prevent further injury prior to seeking medical attention.

Section 4.3.2 Emergency Medical Treatment

15. Why is this section separate from Section 16.4 (Medical Emergency)? No where in this paragraph were 911 mentioned.

Section revised. Refer to Section 4.3.2 on page 17 of Regulatory Submittal Part III(S) – HASP. “Refer to Section 17.6 for the Emergency Plan.” has been added.

16. If individuals are designated to provide first aid/CPR, this may trigger the need for the employer to establish an Exposure Control Plan (ECP) if this is part of their duties (as opposed to acting as a Good Samaritan).

Refer to Attachment 7-Bloodborne Pathogens and Exposure Control Plan in Regulatory Submittal Part III(S) – HASP.

17. Note that there are some exceptions in the OSHA regulations, which might permit Hep B vaccination post incident, but the program needs to be established up front. This is touched on in Section 16.4.3, but still not enough to be an actual plan. For example, it states that “personnel shall use procedures and PPE that minimize the potential for exposure”. The ECP needs to address those specifically.

Refer to Attachment 7-Bloodborne Pathogens and Exposure Control Plan in Regulatory Submittal Part III(S) – HASP.

Section 5.5 Safe Work Permit

18. The text in Section 5.5 does not match the header of “Safe Work Permit” since it only addresses training and recognition of these “special work conditions”, not the need, format, or procedure for a permit.

Section edited out of HASP as Safe Work Permit is not required for SEO procedures. Refer to revised Section 5.5 on page 22 of Regulatory Submittal Part III(S) – HASP for deletion.

19. Section 5.5 of the HASP is also the only mention of confined spaces which could be an issue in cleaning duct work or other areas, as well as deconstruction of certain building components (especially mechanical systems). This should be addressed specifically.

Section edited out of HASP as confined space entry is not required during SEO. A separate HASP will be submitted at a later date for Remediation and Deconstruction that will address confined space entry. Refer to revised Section 5.5 on page 22 of Regulatory Submittal Part III(S) – HASP for deletion.

Section 6.5 Site Security

20. Please clarify why site security (Section 6.5) is under Section 6.0 (Communications). The control measures include safety items.

Section has been re-located. Refer to Section 2.3 on page 9 of Regulatory Submittal Part III(S) – HASP.

Section 8.0 Engineering and Administrative Controls

21. The HASP is very lacking on addressing safety items pertaining to the demolition of a multi-story building. For example, Section 8.0 mentions only one item pertaining to the non-abatement type activities being conducted at the building, “Barricades, railings, or other devices to prevent employee exposure to fall hazards or moving equipment (29 CFR 1926).”

Section revised. Refer to Section 8.0 on page 29 of Regulatory Submittal Part III(S) – HASP. Demolition work is not part of the SEO phase. A separate HASP will be submitted at a later date for Demolition work.

Section 9.0 Personal Protective Equipment

22. The need for Level B protection for jack hammering of concrete is probably over protective. This is not a unique task, and exposures that far above the PEL as to exceed the protection factor of a PAPR are unlikely.

Section revised. Refer to Section 9.0, Page 30 of Regulatory Submittal Part III(S) – HASP. Please note that jack hammering will not be necessary during SEO.

Section 11.2 Operational Precautions

23. Please define what is meant by “extremely hazardous entries.” What criteria will be used?

Section revised and terminology removed. Refer to Section 11.2 on page 34 of Regulatory Submittal Part III(S) – HASP. Extremely hazardous entries referred to confined space entries. Confined space entry will not take place during SEO.

24. Which “off-site personnel” will provide emergency assistance? Does this mean Emergency Services? Does it mean a contractor not on site? Does it mean off-duty employees will be recalled? Please clarify.

Section revised. Refer to Section 11.2, Page 35 of Regulatory Submittal Part III(S) – HASP. Off-site Contractor, Consultant and Subcontractor personnel provide emergency assistance. If the situation requires, emergency services should be summoned to the site by calling 911.

25. This section accurately states that “warning signals for site evacuation must be established”. What are they? This HASP is the vehicle to describe them.

Section revised. Refer to Section 11.2, Page 35 of Regulatory Submittal Part III(S) – HASP. Warning signals for site evacuation would be through three (3) air horn alerts.

26. “Frequent and regular inspections” are required under the standard. The HASP should define how the employer will comply with the standard, not just repeat the requirement and say it will be met. Anything less than once a day on a demolition site would probably be deficient.

Section revised. Refer to Section 11.2, Page 35 of Regulatory Submittal Part III(S) – HASP. “frequent and regular inspection” has been deleted.

Section 13.0 Fire Control Equipment

27. What is “an adequate number of ... fire extinguishers”. How about listing the size (i.e., 10-pound ABC, etc.) and distribution (i.e., every 75’)? Again, the HASP is supposed to define the contractor’s site specific plans for compliance.

Section revised. Refer to Section 14.0 on page 40 of Regulatory Submittal Part III(S) – HASP. An adequate number of approved portable fire extinguishers (class rated A, B and C

and a minimum of 10 pounds) shall be readily available at the Site at all times. A minimum of two (2) fire extinguishers per side of the Building during SEO will be provided totaling eight (8) on Site for this operation. All fire extinguishers shall have current inspection tags.

28. This section states, “All Site personnel shall be trained in the use of the extinguishers.” This conflicts with the fire & explosion instructions in Section 16.1 which states that the building will be evacuated. This needs to be clarified and the discrepancy resolved. Section 13.0 states that “extinguishers shall only be used on outbreak stage fires”. The correct term is “incipient stage”, and does this mean that they will delay evacuation until the fire is no longer incipient? Please clarify.

Section revised. Refer to Section 14.0 on page 40 of Regulatory Submittal Part III(S) – HASP. All Site personnel shall be trained in the use of the extinguishers. Extinguishers shall only be used on incipient stage fires or fires of minor nature. The local fire department shall be contacted in the event of a fire. The building will be evacuated in all cases until a decision about re-entering has been made by the CSO.

Section 14.1 Container Labels

29. The first and third bullet points are duplicated. This section is supposed to be a page and a half of text describing hazard communication, although it’s still not a hazard communication program. Develop a compliant hazard communication program.

Section revised. Refer to Section 15.0 on page 41 of Regulatory Submittal Part III(S) – HASP. A Hazard Communication Program has been added.

Section 15.0 Electrical Lockout/Tagout

30. What about mechanical and other forms of residual energy? Building elevators, mechanical systems, pipes, and more can all result in the unexpected release of energy. This section states that “Specific procedures and permitting requirements will be specified in the HASP...” Since this is the HASP it should be in this HASP.

Section revised. Refer to Section 16.0 on page 42 of Regulatory Submittal Part III(S) – HASP. No objects that could store residual energy will be disturbed during SEO.

Section 16.1 Fire or Explosion

31. For the building evacuation (already addressed above), how about a head count for employee accountability? Also, need to address the use of the fire extinguishers which will be provided per Section 13.0. What is the employer’s policy regarding their use – may any employee use them, only designated employees, or no one? If everyone may use one, since Section 13.0 states that all site personnel will be trained, where is that in the four steps listed in Section 16.1? Please clarify.

Refer to Section 17.6 on page 45 of Regulatory Submittal Part III(S) – HASP, on the 9th line are the words “roll call”.

Section revised. Refer to Section 17.3 on page 44 of Regulatory Submittal Part III(S) – HASP. The paragraph “All Site personnel shall be trained in the use of the extinguishers. Extinguishers shall only be used on incipient stage fires or fires of minor nature. The local fire department shall be contacted in the event of a fire. The building will be evacuated in all cases until a decision about re-entering has been made by the CSO.” has been added.

Section 16.2 Power Failure

32. Still does not list the circumstances when the building will be evacuated per the “note” in the emergency plan which states that certain power failures will require a complete building evacuation.

Section revised. Refer to Section 17.4 on page 44 of Regulatory Submittal Part III(S) – HASP, the paragraph “The criteria for defining the need for building evacuation in the case of “certain power failures” would be the extent or duration of the failure. An example would be that a “total power failure” may require building evacuation for the safety of the workers if a repair was not immediate.” has been added

Section 16.3 Structural Failure

33. This section emphasizes the steps to be taken with regards to the containment areas but at the exclusion of any safety component. This plan states that in the event of an “unanticipated structural failure” that after calling 911 (“if warranted”), the contractors will focus on containment isolation activities and maintaining the isolation barriers. What about evacuation, personnel accountability, engineering assessment, and shoring up the structure?

Section revised. Refer to Section 17.5 on page 44, Item 2 addresses evacuation- “Coordinate the safe exit of any personnel in the SEO work area.”

Refer to Section 17.5 on page 44, Item 5 addresses engineering assessment- “Reentry into the Building following any structural failure will not be allowed until the Owner’s engineer has inspected the area and determined that it is safe to do so. If the conditions of evacuation require emergency responders (police, fire department, EMS) to be summoned to the Site, reentry to the work area must first be approved by the responders before any CSO or engineer determinations may be made.”

Added to this in Item 6 regarding shoring is “Based on engineering assessments, any shoring requirements will be addressed.”

PAL Response to NYS DOL Comments on Environmental & Façade Characterization Reports and Regulatory Submittal Part I Work Plan:

Red = Response

General Comments:

GC1) • Neither of the reports or the work plan included floor plans that identified areas severely damaged by the collapse of building 7. For the reports, these floor plans shall also identify locations of remaining ACM within the building.

Floor plans detailing the extent of structural damage in the gash area and noting the location of in-place ACM have been included as Attachment D to the Report.

GC2) • Tables, figures and plan drawings included within the reports and work plan were illegible due to sizing. Please include revised tables, figures and plan drawings with legible information.

Revised, enlarged tables, figures and plan drawings have been submitted in hard copy for NYS DOL review.

GC3) Information regarding cleaning of the “gash area” needs to be expanded upon. For example,

GC4) What is the extent of the gash area?

The extent of the gash area is illustrated in the drawings included in Attachment D.

GC5) Was the entire gash area cleaned and cleared when bulk debris was previously removed?

No documentation has been provided that the gash area was previously cleaned and cleared other than the gross debris removal conducted by NYC DDC and the NYC DEP Exterior Cleaning Program, which did not include any form of clearance testing. Despite its exposure to weather since 9/11/01, it is considered contaminated for the purposes of project planning, and is to be cleaned during the scaffold erection operation along with the other portions of the façade that require further cleaning.

GC6) Is the gash area now enclosed with temporary barriers to allow for removals and cleaning still necessary? If not, what portion of gash area is enclosed?

The building is enclosed at the gash area with temporary barriers. The gash area itself is not now enclosed. The area outside the temporary barriers is considered building exterior, and will be cleaned as such.

GC7) What is the scope of work and procedures specified to address asbestos project removals, cleanup and required visual inspections within the gash area? Limited information is provided within section 6.3.1 of the work plan, but full details of existing conditions and site-specific procedures to be followed for temporary hardwall barrier and containment construction at the gash area must be included.

Detailed procedures for the cleaning of the gash area are included in *Regulatory Submittal Part I(S) – Scaffold Work Plan*.

GC8) The Department adopted amended Industrial Code Rule 56 (ICR 56) on January 11, 2006. Please modify all references to ICR 56 within subsequent revised reports and work plans to be consistent with current requirements.

Asbestos-related procedures detailed in Regulatory Submittal Part I(S) – Scaffold Work Plan will be in compliance with the new Code Rule.

GC9) • Within the work plan, no detailed procedures were included for the majority of the asbestos project tasks. Instead, references were included which indicated that once selected, the asbestos abatement contractor would determine actual asbestos project procedures within site-specific variance decisions yet to be obtained. This approach is not advisable, as all specifics regarding implementation of the asbestos project should be established by the asbestos project designer prior to the bidding of the project; so all bidders know what will be required to complete the asbestos project.

Detailed procedures for asbestos work tasks are included in Regulatory Submittal Part I(S) – Scaffold Work Plan.

GC10) The role of the project designer is to “plan the scope, timing, phasing and remediation methods to be utilized on any asbestos project”. For an asbestos project that includes asbestos contamination cleanup, and specifically WTC dust/residue cleanup, establishment of the required asbestos project procedures within the work plan is essential, to reduce potential asbestos project procedural problems throughout the course of the asbestos project. If procedures must be specified that aren’t consistent with ICR 56 requirements, a site specific variance must be obtained by the project designer as an agent for the owner, and the procedures and conditions contained within the site-specific variance decision must be incorporated into the work plan specified asbestos project procedures.

Acknowledged.

GC11) All asbestos project design submittals, including variance petitions, must be submitted to DASNY internal asbestos project design personnel for appropriate review and approval, prior to submission to the Department. The Department will not review any site-specific variance petition, or revised work plan asbestos project procedures, without DASNY’s prior approval of the submission.

Project submittals will be reviewed and approved by DASNY prior to submittal.

Specific Comments

PRELIMINARY FACADE CHARACTERIZATION REPORT

SC1) 3.4 ASBESTOS-CONTAINING MATERIAL (ACM) INSPECTION AND TESTING

“Figure F-1 Section view for flashing location” has been added to Attachment D. Section 3.4 has been edited for clarity and correlation with the ACM survey report.

SC2) 4.3 FACADE INTEGRITY

Were operable window hidden surfaces investigated? Do these surfaces still contain WTC dust/residue, which must be cleaned prior to sealing of the windows as critical barriers? Please provide additional information regarding these potentially contaminated surfaces.

The operable window component surfaces are assumed to be contaminated. Detailed procedures to address this contamination will be included in *Regulatory Submittal Part I – Work Plan*. Section 4.3 has been edited to address this.

SC3) 4.4 ASBESTOS-CONTAINING MATERIALS

The only materials referenced within this section are interior vapor barrier and non-friable lintel flashing. Is the lintel flashing included within this section the same as the ACM spandrel flashing mastic and beam flashing mastic at the loading dock entrance identified within the asbestos summary table later in the report? Please correlate these materials appropriately with bulk sample analysis data. Also, no information is apparent within this section regarding the ACM window caulking at the stair and elevator mechanical room roofs, the ACM roof membrane on the 14th floor roof, or the ACM window frame caulking at the first floor exterior of the building. All of these materials were identified within Report Attachment B, Table 1 “Summary of Building Envelope Inspection Results for Asbestos”.

Section 4.4 has been edited for correlation and completeness. No reference is made to the 14th Floor roof material, as it is not considered a “Façade” component for purposes of this report. The 14th floor ACM roofing will be left in place as building protection until it is abated during the Deconstruction Phase of the project. Detailed procedures for this abatement will be included in *Regulatory Submittal Part I – Work Plan*.

PRELIMINARY ENVIRONMENTAL CHARACTERIZATION REPORT

SC4) 1.0 EXECUTIVE SUMMARY

ACM spandrel flashing removal during deconstruction was referenced, but no other exterior ACM identified within the Facade Report was discussed within the summary.

The purpose of the notation in the Executive Summary is to introduce the idea that some abatement will be conducted during the Deconstruction Phase. For completeness, paper flashing associated with the spandrel mastic and the 14th floor ACM roofing have been added. Section 5.4 of the report has been edited to correlate.

SC5) 5.4 ASBESTOS CONTAINING MATERIALS SURVEY

Is the vapor barrier on interior surface of façade block referenced within this section the same as the ACM tar, paper, and fiberglass/felt materials (1st through 15th floor) on the perimeter walls identified within the asbestos summary table later in the report? Please correlate these materials appropriately with bulk sample analysis data. Also, no information is apparent within this section regarding the ACM window caulking at the elevator mechanical room roofs, the ACM roof membrane on the 14th floor roof, or the ACM window frame caulking at the first floor exterior of the building. All of these materials were identified within Report Attachment IV, Table 1 “Summary of Inspection Results for Asbestos”. In addition, the results summary indicates that floor covering materials were assumed to be ACM, but nothing is included regarding the floor covering adhesives/mastics. These materials should also be assumed and treated as ACM, unless appropriate bulk sampling and analyses adequately show the materials to be non-ACM.

The vapor barrier is the tar, paper and fiberglass/felt material noted. Section 5.4 has been edited to note this. In addition, a Laboratory Result Table has been added to the ACM survey report to provide the requested correlation of materials to laboratory sample results.

Floor adhesives and mastics are likewise assumed to be ACM, and have been added to Section 5.4 and to the survey report.

REGULATORY SUBMITTAL PART I – WORK PLAN

SC6) 4.5 ELEVATOR SERVICE

This section indicates that the elevator shafts will be vented to the top floor, which will be placed under negative pressure to filter and control the vented air. However, the reopening request detail drawings don't agree with this proposed method. All asbestos project work plan procedures shall correspond with all conditions and procedures within existing site specific variance decisions, decision amendments and decision re-openings for the project.

Not Applicable to SEO since no personnel will enter the building during this work. Refer to Section 4.5 on page 6 of Regulatory Submittal Part I (S)-SEO Work Plan to which the sentence “An exterior hoist will be erected in the SEO phase and be utilized for compliance with FDNY requirements during the Deconstruction phase” has been added.

SC7) 6.1 OPERATION I – CLEAN ZONE DECONTAMINATION & CLEARANCE

This section indicates that three zones on the first floor will be sealed off, gut-stripped, decontaminated, and then clearance achieved. However, no details regarding specified procedures (i.e. decontamination system enclosures construction, placement and utilization requirements, work area preparation requirements, removal/handling and cleaning procedures, etc.) to complete these tasks were apparent.

Not Applicable to SEO. No personnel will enter Building during SEO.

SC8) 6.2 OPERATION II – EXTERIOR CLEANING

No specific scope of work, or details regarding specified procedures (i.e. decontamination system enclosures construction, placement and utilization requirements, work area preparation requirements, wastewater collection methods, removal/handling methods, cleaning and clearance procedures, etc.) to complete these tasks were apparent.

Refer to Section 6.5 on page 12 of Regulatory Submittal Part I (S)-SEO Work Plan for a description of the exterior cleaning procedures.

SC9) 6.3 OPERATION III – GUT STRIP

6.3.1 Building Envelope Preparation Work

It is unclear how operable window hidden surfaces that may still contain WTC dust, will be cleaned prior to sealing of the windows as critical barriers. Also, the façade cleaning procedures during erection of the scaffolding must be thoroughly defined within the work plan. Also, the specific details regarding barrier installation and establishment of containment at the gash area must also be addressed.

Refer to Section 6.5 on page 12 of Regulatory Submittal Part I (S)-SEO Work Plan. Also, refer to Attachment II-New York State DOL Variance Petition. Please note that windows will not be sealed with critical barriers during SEO. No gut strip activities will take place during SEO.

SC10) 6.3.2 Establishment of Negative Air Pressure

This section refers to a site-specific variance “to be solicited” for alternate procedures. All asbestos project work plan procedures shall correspond with all conditions and procedures within existing site-specific variance decisions, decision amendments and decision re-openings for the project.

Refer to Attachment II – New York State DOL Variance Petition.

SC11) 6.3.3 Material Shredder

More information must be included regarding any proposed shredding operations. For instance, adequate manufacturer information on whatever unit is proposed must be provided, as well as information regarding isolation barriers for the shredding operations within the work area, and all appropriate engineering controls to be utilized during the shredding and bagging/containerization of the shredded waste stream. In addition, no ACM removed shall be shredded.

Not Applicable to SEO. No shredding activities will take place during SEO.

SC12) 6.3.4 Work Areas

This section indicates that the entire structure will be one work area. This approach may be problematic, as the entire work area will be abated, then cleaned then cleared. One floor couldn't be under removal, while another floor was in the cleaning stage or clearance stage, unless work area segregation occurs per floor or group of floors. The single work area approach should be revisited before the work plan is finalized.

Not Applicable to SEO. No interior containments will be established during SEO.

SC13) 6.3.5 Removals

This section includes procedures not in compliance with the current ICR 56. As previously indicated, if procedures must be specified that aren't consistent with ICR 56 requirements, a site-specific variance must be obtained by the project designer as an agent for the owner, and the procedures and conditions contained within the site specific variance decision must be incorporated into the work plan specified asbestos project procedures.

Refer to Section 6.7 on page 13 of Regulatory Submittal Part I (S)-SEO Work Plan. Also, refer to Attachment II-New York State DOL Variance Petition.

SC14) 6.4 OPERATION IV – IN PLACE ACM

No information is apparent within this section regarding the ACM window caulking at the elevator mechanical room roofs, or the ACM window frame caulking at the first floor exterior of the building. These materials were identified within Report Attachment IV, Table 1 “Summary of Inspection Results for Asbestos”. In addition, ACM floor covering materials are included, but nothing is included regarding the floor covering adhesives/mastics. These materials should also be assumed and treated as ACM, unless appropriate bulk sampling and analyses adequately show the materials to be non-ACM.

Not Applicable to SEO. Refer to Section 6.1 on page 7 of Regulatory Submittal Part I (S)-SEO Work Plan. Only 600 square feet of ACM mastic on exterior surface of spandrel beam will be impacted by SEO. Also, refer to Attachment II-New York State DOL Variance Petition.

SC15) *Regardless of the listed ACM's, as previously indicated if procedures must be specified that aren't consistent with ICR 56 requirements, a site-specific variance must be obtained by the project designer as an agent for the owner, and the procedures and conditions contained within the site-specific variance decision must be incorporated into the work plan specified asbestos project procedures.*

Refer to Section 6.0 on page 7 of Regulatory Submittal Part I (S)-SEO Work Plan and Attachment II-New York State DOL Variance Petition.

SC16) 7.3 SCAFFOLDING

A "Deconstruction and Scaffold Layout Plan" was referenced within this section, but not apparent within the documents". The document detailing all appropriate procedures for this work must be included with the work plan.

Refer to Section 6.1 on page 7 of Regulatory Submittal Part I (S)-SEO Work Plan.

SC17) 7.5 DEMOLITION SEQUENCE

No information was apparent in this section regarding sequencing of removals, cleaning and clearance at the contaminated elevator shafts or other remaining contaminated utility areas, prior to commencement of the general deconstruction of the building.

Not Applicable to SEO.

SC18) 7.6 WASTE MANAGEMENT – CONVENTIONAL DEMOLITION

The only information regarding exterior ACM removals included a generalized statement that the non-friable asbestos spandrel flashing would be removed during "conventional demolition". No information was apparent in this section regarding specific asbestos project details for all the exterior ACM removals, which must be completed prior to commencement of the general deconstruction of the building.

Refer to Section 6.7 on page 13 of Regulatory Submittal Part I (S)-SEO Work Plan. Also refer to Attachment II-New York State DOL Variance Petition.