



Remediation and Deconstruction of Fiterman Hall



CUNY/DASNY
Pei Cobb Freed Team
Public Information Session

March 21, 2007



Project Update

- Building will be fully decontaminated before deconstruction
- Scaffold: first step
- Approval of plans is imminent
- Work will begin approximately three weeks after approval
- EPA Comments on Remediation Plan: mid - April



Community Advisory Committee

- **CB 1 and Speaker Silver help establish committee; included are:**

- Local residents, community groups
 - Business and employee representatives
 - Elected Officials
 - BMCC students, faculty
- **CAC met Feb. 9 and March 2**
 - **CAC will meet approximately every 6 weeks**



Agenda

Benn Lewis, Airtek

- Previous Environmental Reports
- Worker Training & Site-Specific Orientation
- The Gaylord Box
- Interpreting Community Monitoring Data
- Community Monitoring Test Parameters

Leslie Mesnick, AKRF

- Emergency Action Plan

Scott Anderson, BMCC

- BMCC Preparedness Plans

Questions and Answers



Requested Topics

- **Previous Environmental Reports**
- **Worker Training & Site-Specific Orientation**
- **The Gaylord Box**
- **Interpreting Community Monitoring Data**
- **Community Monitoring Test Parameters**
- **Emergency Action & Community Notification**



Previous Environmental Reports

H.A. Bader Report – February 18, 2002

Applied Technology Services Report – February 19, 2002

Applied Technology Services Report – March 15, 2002

Tiffany-Bader Report – May 24, 2002

Airtek Insurance/FEMA Study – October 10, 2002



H. A. Bader – February 18, 2002

- **Purpose:** Environmental investigation with focus on fifth floor computer rooms and potential for removing equipment.
- **Testing:** Asbestos, Dioxin, Mercury, PCBs, Metals
- **Conclusion:** Serious environmental contamination. Contents should not be removed. Appropriate respiratory protection must be worn by all personnel entering the building.
- **Response:** Building contents left in place.



ATS – February 19, 2002

- **Purpose:** Re-occupancy evaluation
- **Testing:** Asbestos, Lead, Metals, VOCs, Dust, Dioxins
- **Conclusion:** Contamination is pervasive and ubiquitous. Building should be closed to the public. Further construction activity only with proper respiratory protection and personal protective equipment.
- **Response:** Continued restrictions on entry and interior activities.



ATS – March 15, 2002

- **Purpose:** Investigate apparent mold conditions due to water incursion on upper floors.
- **Testing:** Mold Conditions – Upper Floors
- **Conclusion:** Indicated high concentrations of bacteria and fungi commonly found in a moist environments.
- **Response:** Mold abatement on upper floors, additional measures to prevent incursion.



Tiffany-Bader May 24, 2002

- **Purpose:** Investigate apparent mold conditions due to water incursion on upper floors.
- **Testing:** Mold conditions
- **Conclusion:** Building represents health hazard. Should remain unoccupied until completely decontaminated.
- **Response:** Continued periodic inspection for increasing mold conditions. Additional measures to prevent incursion.



Airtek – October 10, 2002

- **Purpose:** Provide evaluation of previous investigation reports. Evaluate current conditions. Create summary presentation in support of Insurance and FEMA claims.
- **Testing:** Asbestos, Metals, Lead
- **Conclusion:** No re-occupancy without full gut-strip under full environmental containment engineering controls. Stringent clearance requirements for re-occupancy.
- **Response:** Remediation and Deconstruction of Fiterman Hall



Data Summary

Asbestos 20 Micro-vacuum 0 to 1,677,624 s/cm²

Mercury 24 Wipe Samples 0 to 27 ng/sf

Dioxins 28 Wipe Samples 0.65 to 64.69 ng/m²

PCBs 23 Wipe samples None Detected



Data Summary

Metals Wipe Samples

Airtek - 20 Samples

Bader - 24 Samples

Antimony	Wipe samples	<0.9 to 37 ug/sf
Arsenic	Wipe samples	<0.45 to 22 ug/sf
Beryllium	Wipe samples	0.038 to 0.14 ug/sf
Cadmium	Wipe samples	<0.19 to 14.7 ug/sf
Chromium	Wipe samples	<0.45 to 140 ug/sf
Copper	Wipe samples	<1.0 to 1,630 ug/sf
Iron	Wipe samples	<10 to 132,000 ug/sf
Lead	Wipe samples	<1.4 to 1226 ug/sf
Manganese	Wipe samples	0.20 to 1,140 ug/sf
Nickel	Wipe samples	<0.6 to 132 ug/sf
Zinc	Wipe samples	<3.3 to 15,900 ug/sf



Data Summary

Metals Bulk Samples

Airtek – 20 Samples

Cadmium	Bulk Samples	1.45 to 30.3 mg/kg
Chromium	Bulk Samples	11.5 to 271 mg/kg
Copper	Bulk Samples	198 to 838 mg/kg
Iron	Bulk Samples	7,150 to 27,800 mg/kg
Lead	Bulk Samples	68.7 to 744 mg/kg
Manganese	Bulk Samples	0.20 to 1,140 mg/kg
Nickel	Bulk Samples	8.07 to 101 mg/kg
Zinc	Bulk Samples	486 to 13,400 mg/kg



Worker Training & Site Orientation

- **NYS DOL & NYC DEP Asbestos Certification**
- **HASP & Site Orientation**
 - **Worker Safety**
 - **Site Control (Community Protection)**
- **HAZWOPER**
 - **Curriculum Review**
 - **Outreach to Stakeholders**



The Gaylord Box

Construction:

- Dual-lined heavy-duty cardboard box

Advantages:

- Built-in double containment system
- Resistant to tearing - Problem with poly bags
Larger/tougher than ACM bags
- Moveable with palette jacks/forklifts
- Can be stacked – Efficiency of space/transport



Interpreting Community Air Monitoring Data

General Industrial Hygiene Industry Standards:

- Focus on exposure over time: Example = OSHA 8-hr TWA
- Provide verification of project controls – i.e., negative air/critical barriers/PPE
- Identify patterns over long-term project conditions – Identify progressive adjustments

The Fiterman Plan uses the Interrelation of Data:

- Real-time indications of potential problems (dust and mercury vapor)
- Asbestos sampling (a primary WTC CoPC) blankets site (72 points) and provides 24-hour verification of effectiveness of site engineering controls
- Silica, Total Mercury, and Metals at 72 hours
- Organics at 14 days

After Week Two of a 64-week Project:

- Complete picture of initial contaminant patterns
- Complete picture of project performance
- Support data for advisable adjustments to work plan and/or sampling plan



Monitoring Parameters

Turnaround

Trigger

Benchmark

Real Time:

Mercury (Vapor)
PM-10/PM-2.5

Indicator
150/65ug/m³

Indicator
Indicator

24 Hours:

Asbestos

70 s/mm²

Schools (AHERA)

72 Hours:

Silica
Mercury (Total)
Metals

10 ug/m³
3 ug/m³
Various

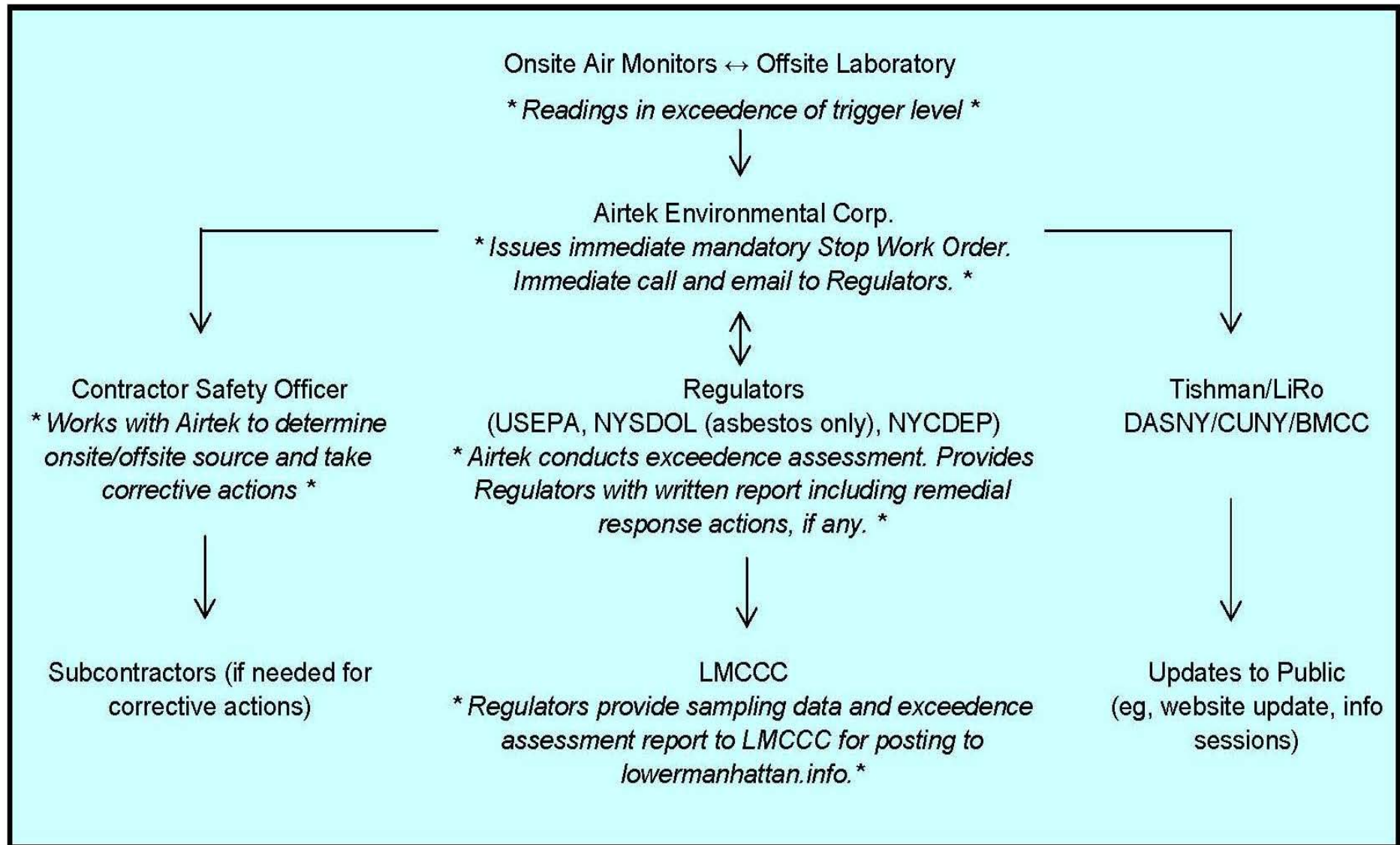
~ WTC Background
USEPA OSHA = 100
USEPA Risk-based

14 Days:

Organics (Dioxin, PCB, PAH)

.025ng/12ug/3.5ug USEPA Risk-based

Fiterman Hall Remediation
Communication Sequence for Air Contaminant Exceedence
Trigger Level Exceedence due to Onsite/Offsite Source

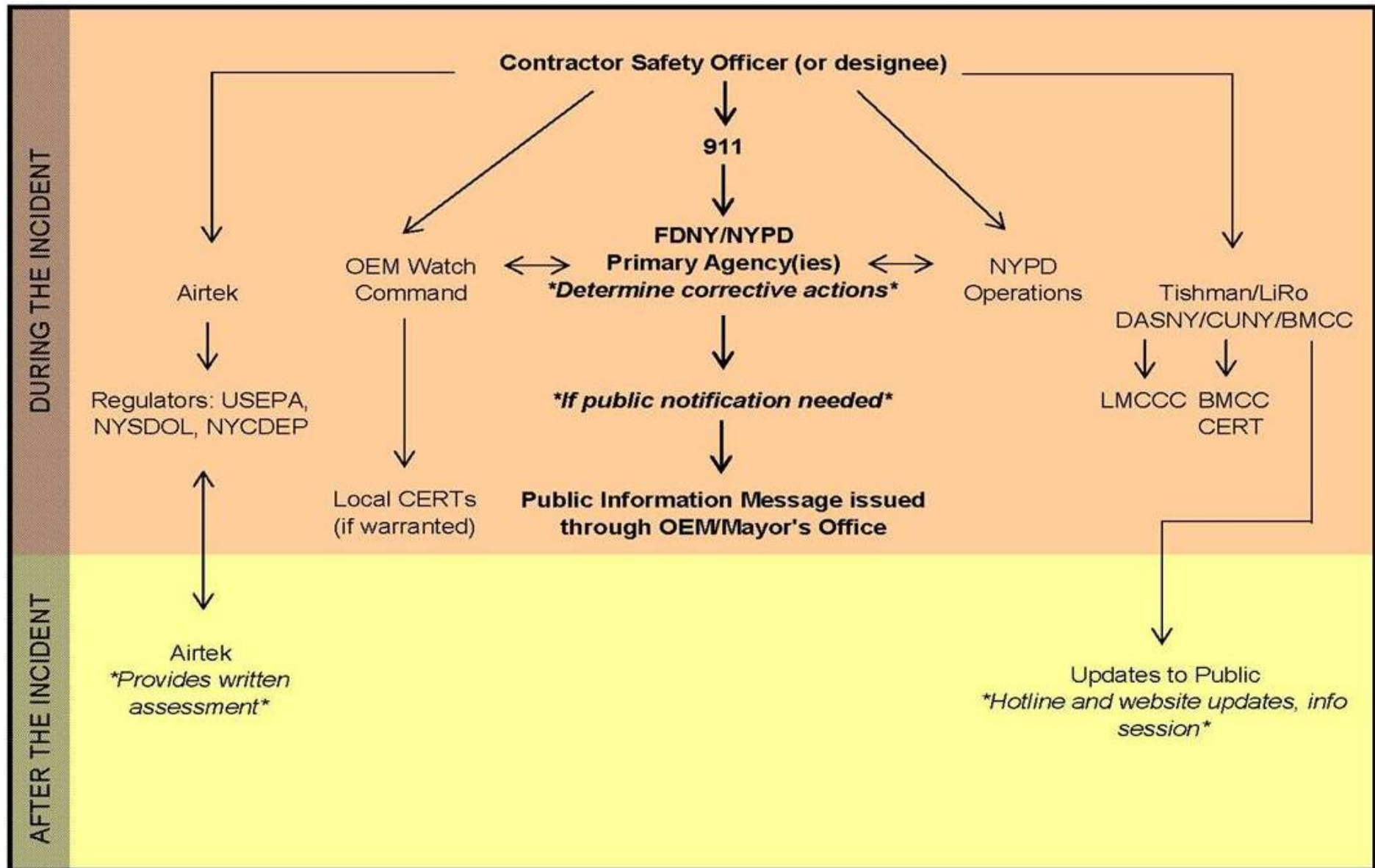




Emergency Action & Community Notification Plan

- Draft Emergency Action & Community Notification Plan issued October 2006
- Comments received at Public Information Sessions and from Community Advisory Committee
- Meeting held with OEM, FDNY, NYPD, and LMCCC to confirm emergency procedures and community notification protocols used in NYC


Fiterman Hall Remediation Communication Sequence for Emergency Situation (e.g., fire, structural failure)





Trained, Skilled, Leadership Staff

- Ed Moss, Director of Public Safety
- Ed Sullivan, Director of Operations, Planning and Construction
- 60 CERT Trained Security and Facilities Staff
- BMCC Community Emergency Management Training Initiative
- Building and grounds personnel, faculty/staff



Expanded Emergency Plans to be Issued

- Detailed brochure for students, faculty and staff on internet
- Excerpted version
 - Handed out in student registration packets, handbook and catalog
 - To be posted in classrooms, lounges, etc.
- Emergency Preparedness information on a health and safety webpage to be added to BMCC's site
- Proposed roll out: four to six weeks



Additional Preparations

- Audio Response System
- Call boxes and AEDs
- EvacuTrak chairs
- Localized exit signage
- Plasma screen alerts
- Drills: Fall, Spring and Summer semesters – night and day drills at 199 Chambers St. and 70 Murray St.



Questions?

www.bmcc.cuny.edu/fitermannews/

[www.lowermanhattan.info/construction/
project_updates/fiterman_hall_39764.aspx](http://www.lowermanhattan.info/construction/project_updates/fiterman_hall_39764.aspx)