

**Meeting Minutes
EPA Indoor Air Working Group Meeting
290 Broadway, RM 27B
May 9, 2002**

Attendees: Kathy Callahan, EPA Region 2
Dore LaPosta, EPA Region 2
Mike Debonis, EPA Region 2
Alice Yeh, EPA Region 2
Mark Maddaloni, EPA Region 2
Carol Lynes, EPA Region 2
Dan Harkay, EPA Region 2
Dick Salkie, EPA Region 2
Paul Simon, EPA Region 2
Beverly Kolenberg, EPA Region 2
Mary Mears, EPA Region 2
Steve Dearwent, ATSDR
Arthur Block, ATSDR
Robert Garvey, OSHA
Bob Chinery, NYSDOH
Nancy Jeffery, NYCDOH
Jim Miller, NYCDOH
Lee Ilan, NYCMOEC

Via Telephone: Dana Tulis, EPA-HQ/OERR
Elissa Feldman, EPA-HQ/OAR
John Girman, EPA-HQ/OAR

Items discussed:

1. Indoor Air Announcement
 - On May 8, 2002, EPA and NYC announced an indoor air monitoring and cleaning comprehensive plan which will, in the short term, address the concerns of lower Manhattan residents. The number of units expected to be cleaned in this effort will be clarified.
2. EPA Background Study Update
 - See revised matrix prepared by Carol Lynes on air monitoring, sampling and analytical procedures.
 - For porous surfaces, microvac samples will be collected for lead and asbestos analysis only.
 - For non-porous surfaces, wipe samples will be collected for asbestos, lead, dioxins, PAHs, silica and man-made vitreous fibers (MMVF).
 - NYS recommended that EPA consider possible wipe sample interference

with XRD analysis for silica.

- Indoor air monitoring is proposed to include PAHs and dioxins in the pilot cleaning study only.
 - The statement of work is almost finalized. It will be shared with the Working Group at the next meeting.
 - NYC needs additional staff to help identify buildings for the background study. A proposal is going to FEMA for assistance.
 - The four buildings used in the ATSDR study can be used as a starting point.
3. Aggressive vs. Non-aggressive Air Sampling
- Aggressive sampling will be used unless it is not feasible in the pilot cleaning.
 - For the short term cleaning announced on May 8th:
 - If dust is visible, clean first then aggressive sample. These are anticipated to be special cases that have to be dealt with as encountered.
 - If already cleaned, aggressively sample. Results may require cleaning recommendation.
 - An education session and/or fact sheets will be prepared for the residents. The issue of “informed requests” will be discussed further.
 - Flexibility is required when dealing with requests outside of the plan as outlined on May 8th.
 - For the background study, aggressive sampling will be used where possible.
 - A questionnaire will be used to ask for permission to aggressive sample.
 - EPA will keep track of when the sampling was modified.
 - If neither leaf-blowers nor oscillating fans are allowed by the tenant, they will not be included in the study.
4. EPA Cleaning Protocol Effort Update
- Release forms have been developed and some have been delivered.
 - Bulk samples have been collected.
 - The lead results are typical for the area.
 - The asbestos results revealed that the samples contain less than 1% asbestos. Therefore, asbestos-certified contractors are not required. They will have taken the OSHA 40-hour safety training.
 - Anticipate the cleaning effort to begin by June.
5. Chemicals of Potential Concern (COPC formerly PIC)
- A proposal has been made to eliminate PAHs and dioxins from the air sampling COPC list
 - Settled dust should be collected and analyzed instead.
 - Co-located air samples will be collected in a few areas to show they are of no concern. However, there is a possibility that samples may get overloaded.
 - The work of the COPC Workgroup is almost complete and the final report will be submitted for peer review.

DRAFT

**Meeting Minutes
EPA Indoor Air Working Group (IAWG) Meeting
290 Broadway, 17th Floor Conference Room
June 6, 2002**

Attendees: Kathy Callahan, EPA Region 2
Dore LaPosta, EPA Region 2
Mark Maddaloni, EPA Region 2
Jean Feola, EPA Region 2
Joe Rotola, EPA Region 2
Carol Lynes, EPA Region 2
Tom Lieber, EPA Region 2
Dan Harkay, EPA Region 2
Don Graham, EPA Region 2
Charles Nace, EPA Region 2
Mary Mears, EPA Region 2
Arthur Block, ATSDR
Debra Gable, ATSDR
Bob Garvey, OSHA
Bob Chinery, NYSDOH
Randi Walker, NYSDOH
Pat Fritz, NYSDOH
Nancy Jeffery, NYCDOH
Michael Gilsenan, NYCDEP
Jim Miller, NYCDOH
Lee Ilan, NYCMOEC

Via Telephone: Dana Tulis, EPA-HQ/OERR
Terry Smith, EPA-HQ/OERR
John Girman, EPA-HQ.OAR
Steve Jones, ATSDR

Items discussed:

1. Contaminants of Potential Concern Update
 - The latest draft of the report will be sent out to the COPC workgroup by June 10th and it is anticipated to go to peer review by June 14th.
 - The funding for peer review is in place.
 - Critics of EPA sampling want more exposure data.
 - EPA will do a small segment of wipe samples for metals such as mercury.
 - Mercury data received from a consultant showed questionable results and instrumentation limitations
 - EPA and NYCDOH will do some follow-up sampling with a more reliable instrument. This issue will be discussed further at a later date.
 - An assessment of mold is being performed to determine if cleaning is needed.

2. Background Study

- The Internal Review Board (IRB) must give their approval before tenants can be contacted.
 - Mark Maddaloni will ask the IRB for an estimated turnaround time.
 - Jim Miller will fill out the IRB application, attaching the SOW and the tenant questionnaires and submit to Carol Lynes and Dana Tulis for review. He will also make sure that the required letter from the NYCDOH Deputy Commissioner accompanies the IRB application.
- Communication of the results of the Background Study will be discussed at a later date.
- The SOW was sent to four contractors. The contractors asked for clarification on some items and they will be addressed. Although the bids were due June 7th, the deadline will be extended to June 14th.
- Aggressive sampling:
 - The Background Study's aggressive sampling will use oscillating fans.
 - The Lower Manhattan Clean-up will be using leaf blowers for clearance purposes.
 - Advice and guidance need to be developed for tenant occupation of apartments during aggressive sampling.
- HVAC units will be sampled onsite. Samples will be collected from the filters.

3. Pilot Cleaning

- Comments on the draft SOW have been received.
- A potential setback in the project was corrected in time. The NYC Department of Design and Construction (DDC) has taken back buildings surrounding Ground Zero in an effort to recover additional human remains.
 - DDC had a contractor cleaning 110 Liberty Street on June 5th, however, the NYCDEP was able to stop the cleaning before they could finish. NYCDEP then gave the DDC their SOW for the cleaning of the other buildings.
 - EPA does not believe this will affect the Pilot Cleaning due to the way the effort was poorly run.
- EPA is still working on obtaining access agreements.
- Sample collection will begin within two weeks. It is anticipated that the Pilot Cleaning will be completed by the end of July.

4. Exterior Cleaning

- After inspecting 1,070 buildings, 251 were not cleaned to date. The City boundaries of where the dirty buildings were found will be discussed at the next IAWG meeting.
- License agreements are still being worked on.
- To date, no requests to have buildings in Brooklyn cleaned have been received, so no Brooklyn buildings have been inspected.
- Air monitoring will be performed during the exterior cleaning on the building roofs. The street level monitoring is in effect until August. EPA's ambient monitors are expected to be turned off on June 16th.

DRAFT

5. **FEMA Submission**

- There is a meeting scheduled for the afternoon of June 6th. A representative from NYC OEM will be contacted so they can discuss the proposals submitted by the NYC agencies.
- It is still unclear if FEMA will be supplying HEPA vacuums to tenants and building owners. Engineering controls should be considered for the time-period after cleaning during the Pilot Cleaning.

Next meeting: June 13th 10:00 AM - 12:00 PM @ 290 Broadway.

165 Duane
261 Broadway

jet

**Meeting Minutes
EPA Indoor Air Working Group (IAWG) Meeting
290 Broadway, RM 1940
May 30, 2002**

MHJ
6/13/02

{ Next mtg Two
Weeks from today }

Final draft COP due
today by 12:00

Attendees: Mark Maddaloni, EPA Region 2
Jean Feola, EPA Region 2
Bob Fitzpatrick, EPA Region 2
Carol Lynes, EPA Region 2
Tom Lieber, EPA Region 2
Dan Harkay, EPA Region 2
Tanya Mitchell, EPA Region 2
Arthur Block, ATSDR
Bob Chinery, NYSDOH
Sam Benson, NYCOEM
Jim Miller, NYCDOH
Lee Ilan, NYCMOEC

Via Telephone: Dana Tulis, EPA-HQ/OERR
Terry Smith, EPA-HQ/OERR
Sven Rodenbeck, ATSDR

Items discussed:

1. Contaminants of Potential Concern Update
 - The report is still being finalized.
 - Refractory ceramic fibers have not given the COPC working group any reason for concern, therefore, it will be dropped from the COPC list.
2. Background Study Statement of Work
 - The current draft SOW went to the EPA contracts office and quotes are expected during the week of June 3rd.
 - Tenant release forms for access to their apartments are still an issue.
 - The Internal Review Board (IRB) may have concerns about the tenants giving “informed consent”.
 - ATSDR will email to the IAWG the language that was used for the ATSDR Study.
 - NYCDOH should have the consent form from the ATSDR Study that can be modified for the Background Study
 - The IRB process may take up to two weeks and is not expected to be a major hurdle.
 - Comments on the draft SOW are being addressed.
 - Commenter: PAH quantification limit not indicated in the SOW
IAWG - Let the lab determine the practical quantification limit rather than alter the sample collection method.

Tues ⇒ sampling to start

Board
N/D for release

- Commenter: Total dust sample analysis method is not established.
IAWG - The lab has come up with a method for determining total dust from wipe samples.
 - Commenter: Personal protective equipment (PPE) recommended for contractors but not for apartment occupants.
IAWG - Will include an explanation that the contractors will be more sensitive to exposure due to the aggressive activities they will be performing for sample collection.
 - Commenter: Are the laboratories adequately certified?
EPA has confirmed that the labs are each certified as required for the analysis they will be performed.
 - The sampling will be completed within 21 days of the start of collection.
 - There will be a 5-day lab analysis turnaround for Dioxins and PAHs. There is a 3-day turnaround for all other COPC.
 - The filters in the window A/C units will be shaken to collect samples. Building management will be asked for the filters from HVAC units.
3. Pilot Cleaning
 - The draft SOW was handed out at the meeting.
 - FEMA has not commented on the draft SOW to date.
 - EPA still has not been given access to all areas of the building and tenant spaces yet.
 - Air sampling will be performed during the cleaning effort and after.
 - Three samples will be collected for Dioxins and PAHs at first to determine if anymore need to be collected.
 - The contractors are ready to start the week after all access agreements are signed.
 4. Peer Review
 - No final decision yet.
 5. Recommendations for HVAC Cleaning
 - NYCDOH sent a draft document to EPA for comment.
 6. FEMA Submission
 - Although not yet in writing, FEMA agreed to provide some form of funding to reimburse tenants for the replacement of their window A/C units.
 - EPA will check if FEMA will be making HEPA vacuums available for use upon request.
 7. Lower Manhattan Cleaning
 - The hotline will be online on June 3rd.
 - EPA anticipates the cleaning to begin late July or early August.

Next meeting: June 6th at 10:00 AM - 12:00 PM @ 290 Broadway.

2650 cleaning & testing
over 600 test only

DRAFT

59 Bkg = white & approval

Meeting Minutes
EPA Indoor Air Working Group (IAWG) Meeting
290 Broadway, 19th Floor Conference Room
June 13, 2002

7/16/02

Attendees: Kathy Callahan, EPA Region 2
Dore LaPosta, EPA Region 2
Mark Maddaloni, EPA Region 2
Matt Hiester, EPA Region 2
Joe Rotola, EPA Region 2
Charles Nace, EPA Region 2
Arthur Block, ATSDR
Debra Gable, ATSDR
Bob Chinery, NYSDOH
Nancy Jeffery, NYCDOH
Michael Gilsenan, NYCDEP
Jim Miller, NYCDOH
Lee Ilan, NYCMOEC

EPA ⇒ Needs to con.
flow rates between background
(9 hrs) and clean up ~~in~~ downtown
(6 hrs).

cleaning contract ⇒ wet wire
Score (A) option
Materials that are not been effectively
clean will be disposed prior authorize

Via Telephone: Elissa Feldman, EPA-HQ/OAR
Sven Rodenbeck, ATSDR

monitoring contract } metal
data
50 test only

Items discussed:

State attorney general
SOP to be developed if we
find as lead, fuel, asbestos, mold

1. Meeting frequency.
 - These meetings will be held biweekly from now on. The next meeting date will be June 27th. (Dust and)

2. Contaminants of Potential Concern Update
 - Comments on the latest draft of the report are due by noon today, June 13^h.
 - The final draft can go to peer review on June 14th or, the latest by June 17th.
 - Mark will speak to Peter Grevatt to set things up with the contractor.
 - The cover letter to the peer review panel will ask for informal feedback within four weeks. It will also include the objective and charge to the panel.
 - A process for selecting the peer review panelists will be developed by the contractor, Toxicology Excellence for Risk Assessment (TERA).
 - The COPC report will be used in the Background and Pilot Cleaning Studies.
 - 5% or up to 200 wipe samples will be collected for metals analysis.
 - PH is a concern for some in the public.
 - NYSDOH will submit a proposal to EPA for additional sample collection for NYSDOH studies.
 - NYCDOH will assist EPA with the visual assessment of mold in apartments and will identify the need for clean-up and FEMA funding.

DRAFT

- Mercury sampling will be done by EPA on June 17th at 47 Ann Street. NYCDOH and NYCOEI will be a part of this effort.
 - Bulk samples collected of mercury and asbestos at 130 Cedar Street were either very low or none detected.
3. Background Study
- The study has been approved for FEMA funding.
 - The IRB application is almost finalized. Nancy Jeffery will be listed as the Principle Investigator and Carol Lynes will be listed as the EPA Project Officer.
 - The access agreement in its final or final draft form along with Carol Lynes' resume will be forwarded to NYCDOH by COB today, June 13th.
4. Pilot Cleaning
- Personal monitoring should be done while cleaning to address reservoirs of contamination in very visibly dirty areas.
 - Pre-clean sampling will begin on June 18th. Aggressive sampling will be done in 6 units.
 - The SOW will be finalized by June 14th.
 - A dry run with the contractor of the sampling protocol will be performed at the EPA lab in Edison, NJ on June 17th.
5. FEMA Submission
- EPA is currently preparing a matrix showing the responsibilities of each agency in the lower Manhattan cleaning.
6. Exterior Cleaning
- Cleaning began on the weekend of June 1st. Four buildings have been completed.
 - License agreements are still coming in.
 - NYCDEP would like to start cleaning the Liberty Street building on June 17th but the owner is hesitant. If samples reveal asbestos greater than 1%, he will be required to clean at his own expense.
 - The northern boundary line appears to be at Duane Street.

Next meeting: June 27th 10:00 AM - 12:00 PM @ 290 Broadway.

156 William St

WTC Indoor Air Work Group Meeting February 27, 2002

10:30 - 10:40 Introduction

10:40 - 11:45 Discussion of Remaining Unresolved Issues
Risk Characterization

11:45 - 12:15 Identify Leads for Consensus Activities and Next Steps

12:15 to 1:00 FEMA Request for Detailed Plan, due March 11
Develop Outline, make assignments for completion

1:00 Schedule Next Meeting

cleanup - 1 - 10,000 → comfortable to emergency → 1 yr. exposure
cleanup ~~FMSO~~

long term - 1 - 1 mil. 30 yr

contaminants of concern - can we get

Doug Kilpin → indoor air → EPA → will come.
→ ambient → EPA → communications group of ambient air
Anita > Bonnie Belair } EPA communication
Bonnie Peyer } job? Bgm?

EPA → will come up with standards for
contaminants so that they can be
compared to clean up of Bldg. & ATSDR

DOH → will score out advocates for ground
level.

DFP → EPA > mission Statement on
Data base > what would it take
indoor Private Bldg. screen.

10:30 March 6 → EPA

DRAFT

**Meeting Minutes
EPA Indoor Air Working Group (IAWG) Meeting
290 Broadway, RM 1940
May 30, 2002**

Attendees: Mark Maddaloni, EPA Region 2
Jean Feola, EPA Region 2
Bob Fitzpatrick, EPA Region 2
Carol Lynes, EPA Region 2
Tom Lieber, EPA Region 2
Dan Harkay, EPA Region 2
Tanya Mitchell, EPA Region 2
Arthur Block, ATSDR
Bob Chinery, NYSDOH
Sam Benson, NYCOEM
Jim Miller, NYCDOH
Lee Ilan, NYCMOEC

Via Telephone: Dana Tulis, EPA-HQ/OERR
Terry Smith, EPA-HQ/OERR
Sven Rodenbeck, ATSDR

Items discussed:

1. Contaminants of Potential Concern Update
 - The report is still being finalized.
 - Refractory ceramic fibers have not given the COPC working group any reason for concern, therefore, it will be dropped from the COPC list.
2. Background Study Statement of Work
 - The current draft SOW went to the EPA contracts office and quotes are expected during the week of June 3rd.
 - Tenant release forms for access to their apartments are still an issue.
 - The Internal Review Board (IRB) may have concerns about the tenants giving “informed consent”.
 - ATSDR will email to the IAWG the language that was used for the ATSDR Study.
 - NYCDOH should have the consent form from the ATSDR Study that can be modified for the Background Study
 - The IRB process may take up to two weeks and is not expected to be a major hurdle.
 - Comments on the draft SOW are being addressed.
 - Commenter: PAH quantification limit not indicated in the SOW
IAWG - Let the lab determine the practical quantification limit rather than alter the sample collection method.

- Commenter: Total dust sample analysis method is not established.
IAWG - The lab has come up with a method for determining total dust from wipe samples.
- Commenter: Personal protective equipment (PPE) recommended for contractors but not for apartment occupants.
IAWG - Will include an explanation that the contractors will be more sensitive to exposure due to the aggressive activities they will be performing for sample collection.
- Commenter: Are the laboratories adequately certified?
EPA has confirmed that the labs are each certified as required for the analysis they will be performed.
- The sampling will be completed within 21 days of the start of collection.
- There will be a 5-day lab analysis turnaround for Dioxins and PAHs. There is a 3-day turnaround for all other COPC.
- The filters in the window A/C units will be shaken to collect samples. Building management will be asked for the filters from HVAC units.

DDC. 3. Pilot Cleaning

- The draft SOW was handed out at the meeting.
- FEMA has not commented on the draft SOW to date.
- EPA still has not been given access to all areas of the building and tenant spaces yet.
- Air sampling will be performed during the cleaning effort and after.
- Three samples will be collected for Dioxins and PAHs at first to determine if anymore need to be collected.
- The contractors are ready to start the week after all access agreements are signed.

Handwritten: Know to comment if con.

4. Peer Review

- No final decision yet.

5. Recommendations for HVAC Cleaning

- NYCDOH sent a draft document to EPA for comment.

6. FEMA Submission

- Although not yet in writing, FEMA agreed to provide some form of funding to reimburse tenants for the replacement of their window A/C units.
- EPA will check if FEMA will be making HEPA vacuums available for use upon request.

Handwritten: Rush DDC Effort cleaning we should monitor.

7. Lower Manhattan Cleaning

- The hotline will be online on June 3rd.
- EPA anticipates the cleaning to begin late July or early August.

Handwritten: Next week 19th floor

Next meeting: June 6th at 10:00 AM - 12:00 PM @ 290 Broadway.