CIAQ
Federal Interagency
Committee on Indoor Air Quality

Meeting Minutes for Wednesday, June 3rd 2009

These minutes include:
(A) Final Agenda
(B) Key words (for these minutes)
(C) Department-Agency updates/reports and GAO Mold Report
(D) Summary of the H1N1 presentation (references available on the website for a limited time)
(E) Q&A associated with Agency Updates and GAO Mold report
Note: The H1N1 Presentation, references and Q&A are available separately on website.

Attendance: 130 (22 in-person and 108 remotely).
Next CIAQ meeting/webinar: Wednesday, October 21st 2009, 1:00 – 4:00 pm
Please direct your CIAQ related questions to the Philip Jalbert (Executive Secretary, ciaq@epa.gov). Join the CIAQ Listserve for meeting notices, minutes and other CIAQ-IAQ news. To subscribe, send an email with a blank 'subject' line to ciaq-subscribe@lists.epa.gov. Visit the CIAQ website for details and directions (http://www.epa.gov/iaq/ciaq).

(A) Final Agenda

Welcome, Introductions & CIAQ News/Updates – *Anna Duncan & Phil Jalbert*

1 - Updates from CIAQ Member Departments & Agencies

1.1-HHS Office of the Surgeon General, *Marybeth Bigley*
*Call-to-Action on Healthy Homes

1.2-USPS United State Postal Service, *Charlotte Parrish*
*Vapor Intrusion/Guidance

1.3-CPSC Consumer Product Safety Commission, *Joanna Matheson*
*Imported Drywall, Portable Generators

1.4-NIOSH National Institute for Occupational Safety & Health, *Ju-Hyeong Park, Jean Cox-Ganser*

1.5-GSA General Services Administration, *David Marciniak*

1.6-HUD Housing & Urban Development, *Peter Ashley*

1.7-EPA Environmental Protection Agency, *Anna Duncan*
*Asthma, PCIA, School Siting Guidelines and Air Toxics Monitoring

2 - Implementing GAO's Mold Recommendations (http://www.gao.gov/products/GAO-08-980).

3 - Presentation: *Swine H1N1 Influenza A: Transmission of Viruses in Indoor Air - HVAC System Protection Options,* by Steven Welty (GreenCleanAir@aol.com, 703.927.7532).

(B) Key Words, Phrases, Tags

The following key words/phrases/tags are intended to assist the reader locate topics of interest contained in these minutes; the agency/section associated with the topic is shown parenthetically, e.g., (CSPC, 1.3).

Acoustics, acoustical criteria (GSA, 1.5.3)
American Recovery and Reinvestment Act (HUD 1.2)
Asthma (EPA, 1.7.1; CPSC, 1.3.3)
CIAQ Mold Workgroup (MWG) (EPA, 2)
Corrosion (drywall, CPSC 1.3.3)
CO (carbon monoxide) emission (CPSC, 1.3.1)
Drywall (CPSC, 1.3.3)
Federal buildings (GSA, 1.5.2)
Florida (CPSC, 1.3.3)
GAO Mold Report (http://www.gao.gov/products/GAO-08-98) (EPA, 2)
H1N1, Influenza, flu (D)
Healthy Homes, technical studies (HUD, 1.6.1)

Healthy Homes Strategic Plan (HUD, 1.6.4)
High performance green buildings (GSA, 1.5.2)
HVAC design (GSA, 1.5.4)
IAQ/IEQ research plan (GSA, 1.5.1; HUD, 1.6.2)
IAQ Scientific Findings Resource Bank (EPA, 1.7.4)
Imported drywall (CPSC, 1.3.3)
Indoor airPLUS (EPA, 1.7.3)
Multi-family housing (HUD, 1.6.2.2)
Office buildings (NIOSH, 1.4)
Ozone-generating air cleaners (CPSC, 1.3.2)
Partnership for Clean Indoor Air (PCIA) (EPA, 1.7.2)
Portable generators (CPSC, 1.3.1)
Post occupancy evaluations (GSA, 1.5.3)
Schools (NIOSH, 1.4)
Strategic Plan (HUD, 1.6.4; HHS, 1.1)
Surgeon General's Call to Action to Promote Healthy Homes (CTA) (HHS, 1.1)
Vapor intrusion (USPS, 1.2)
Weatherization (HUD, 1.6.2.3)
www.recovery.gov (American Recovery and reinvestment Act, ARRA)(GSA, 1.5.1)

Welcome, Introductions, News and Announcements. Anna Duncan, Deputy Director, Indoor Environments Division and Phil Jalbert welcomed everyone to the meeting. Those in attendance in the meeting room introduced themselves by giving their name and affiliation; Feds were asked to tell what interest brought them to the meeting. Phil Jalbert made several announcements:

(1) Ms. Gina McCarthy had been confirmed as the new Assistant Administrator for Air and Radiation programs at EPA.
(2) An Advisory Group to the United Kingdom's Health Protection Agency had recommended a lower radon action level of 100 Bq/m3 (2.7pCi/L), half the current UK action level. The U.S. action level is currently 148 Bq/m3 (4pCi/L). Health Canada recently lowered its action level by three-quarters to 200 Bq/m3 (5pCi/L) from 800 Bq/m3.
(3) The order of the agenda had changed to have the GAO mold report discussion follow the EPA update, which would be followed by the presentation.

(C) Department and Agency Updates

1.1 HHS-Office of the Surgeon General (OSG)

The who's who of healthy homes gathered on the morning of June 9th to celebrate the release of *The Surgeon General's Call to Action to Promote Healthy Homes* (CTA), and of HUD's Healthy Homes Strategic Plan. You can access the CTA via http://www.surgeongeneral.gov/topics/healthyhomes/index.html or http://www.surgeongeneral.gov, and http://www.hud.gov/offices/lead/library/hhi/DraftHHStratPlan_9.10.08.pdf for HUD's Strategic Plan.

The Director of the National Building Museum, Chase Rynd, welcomed everyone and introduced the acting Surgeon General, Rear-Admiral Steven Galson. Remarks were also made by Ron Sims, Deputy HUD Secretary for Development and Jon Gant, and Howard Frumkin, Director, National Center for Environmental Health, ATSDR, and Mary Jean Brown, also of the NCEH/ATSDR (POC: Marybeth Bigley, Marybeth.Bigley@hhs.gov).

1.2 USPS–United States Postal Service

Charlotte reported briefly on the progress her workgroup of eight has made in developing the draft of the USPS vapor intrusion (VI) guidance, based on ASTM's guidance, and produced entirely in-house. The table of contents for the draft is reproduced below for your convenience; Charlotte and the USPS are open to receiving your comments. Vapor intrusion is "becoming a huge issue within USPS" Charlotte reported, in part due to the large number of facilities owned and operated by USPS. Also, members of the environment health and safety staff are usually the first

responders. Charlotte also noted that the VI investigation in Appendix C represents a streamlined approach. The guidance is expected to be final in September (POC: Charlotte Parrish, charlotte.parrish@usps.gov).

05/29/09 DRAFT USPS Vapor Intrusion Guidance (Charlotte Parrish/VI Group)

Table of Contents

1. Introduction
   - 1.1 Objectives
   - 1.2 Today's Vapor Intrusion Concerns
   - 1.3 USPS and Vapor Intrusion
   - 1.4 Regulatory and USPS Policy Overview

2. Addressing Vapor Intrusion
   - 2.1 Common VI Sources
   - 2.2 Human Health Concerns from VI
   - 2.3 VI Investigation Basics
     - 2.3.1 VI Investigation Factors
   - 2.4 Resources to Guide VI Response
     - 2.4.1 Environmental Protection Agency
     - 2.4.2 International Technology and Regulatory Council
     - 2.4.3 Occupational Safety and Health Administration
     - 2.4.4 American Society for Testing and Materials
     - 2.4.5 Other Resources

3. Responding to Vapor Intrusion Inquires and Site Access Requests
   - 3.1 Employee Inquiries (Formal or Informal)
   - 3.2 Third Party Inquiries
     - 3.2.1 Site Access Requests (Verbal or Written)
     - 3.2.2 Owned vs. Leased Facilities

4. USPS Real Estate and Design and Construction Vapor Intrusion Considerations
   - 4.1 Due Diligence – ASTM and Beyond
   - 4.2 Assessing Various Real Estate Projects for VI Issues
     - 4.2.1 New Construction (Acquired or Leased Property)
     - 4.2.2 Facility Expansions (Postal-owned or Leased Property)
     - 4.2.3 Site Disposals
     - 4.2.4 Site Developmental Projects

5. Maintaining a Preventative Approach
   - 5.1 Making Well-informed Real Estate Decisions
   - 5.2 Making Well-informed Design and Construction Decisions
     - 5.2.1 USPS Building Design Standards that Can Apply
     - 5.2.2 VI Engineering Controls and Strategies

6. Vapor Intrusion Realities – USPS Case Studies
7. Roles and Responsibilities
   - 7.1 Key Staff
     - 7.1.1 Facility Installation Head ('Installation Head')
     - 7.1.2 Team Leaders, Environmental Compliance and Risk Mitigation, and Their Staff
     - 7.1.3 Safety Managers and Specialists
     - 7.1.4 Medical
     - 7.1.5 Facilities Department
       - 7.1.5.1 Facilities Environmental Specialist
       - 7.1.5.2 Real Estate Staff
       - 7.1.5.3 Design and Construction Staff

1.3 CPSC-Consumer Product Safety Commission

1.3.1 Portable Generator Project: the CPSC contract with the University of Alabama for the development and demonstration of a prototype low CO emission portable generator is in the process of being extended for completion in Dec 2009. An automatic engine shutoff feature is being developed for incorporation into the prototype design. The IAG with NIST is being extended to include testing of the shutoff-equipped prototype generator (POC: Janet Buyer, 301.504.7542).

1.3.2 Ozone-Generating Air Cleaner project: the staff package is continuing to proceed through agency signoff (POC Treye Thomas, 301.504.7738).

1.3.3 Imported Drywall (POC: Joanna M. Matheson; 301-504-7043; jmatheson@cpsc.gov).
CPSC drywall information center - sign-up for email alerts - http://www.cpsc.gov/info/drywall/index.html

CPSC has received over 380 reports from residents in 18 states and the District of Columbia who believe their health symptoms or corrosion of certain metals are related to drywall imported from China. The majority of the reports have come from consumers residing in the state of Florida. Consumers report that their homes were primarily built in 2006 to 2007, when an unprecedented increase in new construction occurred, in part due to the hurricanes in the United States in 2004 and 2005. The CPSC investigation has several tracks: (1) evaluating the relationship between the drywall and the reported health symptoms; (2) evaluating the relationship between the drywall and electrical, fuel gas piping, and fire safety issues in the homes; and (3) tracing the origin and distribution of the problem drywall.

The most frequently reported symptoms are irritated and itchy eyes and skin, difficulty in breathing, persistent cough, bloody noses, runny noses, recurrent headaches, sinus infection, and asthma attacks. Since many consumers report that their symptoms lessen or go away when they are away from their home, but return upon re-entry, it appears that

these symptoms are short-term and related to something within the home. At this time however, any such relationship or long-term effects are unknown. Some of these symptoms are similar to colds, allergies, or reactions to other pollutants in the home. Thus, it is important to carefully determine that the reported symptoms are related to the drywall and not to other environmental factors or pollutants in the home.

In addition to investigating the corrosion problems, the CPSC is undertaking a multi-pronged testing approach to assess the impact on human health. The Commission does not possess the equipment or expertise or staff resources to conduct the types of studies that are needed. The data generated by the studies will be used by the staff to perform a health risk assessment. The three elements of the testing approach are:

- In-home air sampling (field) studies - continuous, real-time measurements of the sulfur, acid and other gases, including the presence of Freon byproducts. Measurements will account for humid conditions as well as various times of day.

- Laboratory elemental characterization studies of domestic and imported drywall - characterization of components of drywall and identification of differences.

- Laboratory chamber studies of domestic and imported drywall - chamber studies to separate and isolate chemical emissions from drywall as opposed to chemicals emitted from other products found in the home.

Florida Update. Tim Wallace and Clark Eldredge gave a brief update on drywall related activities in Florida, their response center and Department of Health drywall website - http://www.doh.state.fl.us/environment/community/indoor-air/drywall.html
The website includes many resources, among them a May 26th letter and sample analysis report from EPA Administrator Lisa Jackson. See also the question/answer for Q4 in section E of these minutes.

1.4 NIOSH-National Institute for Occupational Safety and Health

NIOSH Investigators presented aspects of their work on office buildings and schools at the Orlando conference "Approaches to managing Mold in Buildings" in April 2009. We continue work on our NORA funded project on indoor environmental quality in relation to respiratory health in schools.
(POC: Dr. Jean Cox-Ganser (jjc8@cdc.gov)

1.5 GSA-General Services Administration

1.5.1. Office of Federal High Performance Green Buildings (OFHPGB). The Energy Independence and Security Act (EISA) of 2007 (PL 110-140) mandated the creation of a federal office to promote, coordinate and advocate for green building activities throughout the federal government. The GSA was assigned responsibility to create and operate the office however funding was not provided in the 2007 Act. The recent American Recovery and Reinvestment Act (ARRA) appropriated the funding for the OFHPGB and GSA plans to select a permanent director by the end of July 2009. Office staffing will follow as well as the development of an IAQ/IEQ research plan. Specifics are posted at www.recovery.gov including accomplishments to date.

1.5.2. American Recovery and Reinvestment Act (ARRA). The GSA received $5.55B in ARRA funding for federal buildings, $4.5B of which is to be applied toward high performance green building improvements. Consequently many of the "green" projects directly address or include improvements to IAQ/IEQ. Projects include improvements to HVAC systems, lighting improvements, acoustic projects and a focused effort on building re-commissioning / building "tune-ups".

1.5.3. Post Occupancy Evaluations (POEs). Surveys of occupants generally find that buildings meeting the Leadership in Energy and Environmental Design (LEED) standards, the benchmarks for greenness, score higher on all measures except one: acoustics. This issue was addressed by Kevin Powell, research director for the GSA, at a recent meeting of the Acoustical Society of America (ASA) in Portland, Oregon.

Some design elements that score well on LEED checklists, such as bare concrete ceilings that improve heating and cooling efficiency or low cubicle walls that reduce lighting needs, also allow sound to travel farther. A paradoxical problem: High-efficiency heating and cooling systems in LEED-rated buildings tend to be much quieter than wasteful ones, lowering inoffensive background noise that can mask distracting sounds.

Until recently, advocates of green building have neglected acoustical criteria. The ASA meeting marks the first time acoustical scientists and engineers have put the problems of green building design on its program. Acoustical measures are becoming part of LEED-standards and building codes for hospitals and schools, but noise is often an afterthought for less specialized structures. Powell made a plea to the acoustical experts. "We need you to help us with best practices and enforceable standards that are achievable," he said, because only when there is a clear and simple check box for acoustics will the indoor environment of green buildings ring true.

1.5.4. HVAC Design Excellence Conference. GSA held their annual HVAC Design Excellence conference in May 2009. This year's focus was on high performance green buildings. Topics included post occupancy evaluations, integrated design, operations and maintenance, intelligent buildings and building commissioning. The minutes of the meeting will be posted on the Whole Building Design Guide website (www.wbdg.org).

1.6 HUD-Office of Healthy Homes and Lead Hazard Control (OHHLHC)

1.6.1-OHHLHC Awards $99.5 Million in Recovery Act Grants

The HUD OHHLHC awarded $99.5 million in American Reinvestment and Recovery Act Funds to 53 applicants for Fiscal Year 2008 grants. The applicants were eligible for funding but could not receive awards because of insufficient funds. Grants were awarded in the following categories: 32 Lead Hazard Control; 20 Healthy Homes Demonstration; and 2 Healthy Homes Technical Studies. Brief project abstracts, ordered by the state in which the grant recipient is located, can be viewed at: http://www.hud.gov/offices/lead/library/misc/OHHLHC_ARRA_grants.pdf.
HUD contact: Matt Ammon: matthew.e.ammon@hud.gov

1.6.2-OHHLHC Supporting New IAQ/IEQ Research with Federal Partners

1.6.2.1 Home ventilation/IAQ: Through an interagency agreement (IAA) with the Dept. of Energy (DOE), the Office is supporting follow-up work using data from a recently conducted study in which IAQ and ventilation-related measurements were collected in over 100 homes in various parts of California. IAA funds will be used to support work by the Lawrence Berkeley National Laboratory; they will conduct a quantitative risk analysis of the airborne contaminant data and conduct additional field data collection from homes in other areas of the U.S. If funding is available, this pilot data collection will lead to a larger scale study of IAQ and home characteristics in various climatic regions of the U.S.

1.6.2.2 Green rehab study: Through an IAA with the CDC National Center for Environmental Health, the Office is partnering to conduct a study of the potential IEQ and health benefits resulting from the "green" rehab of federally-assisted multifamily housing (e.g., use of IPM for pest control, use of low emission building materials).

1.6.2.3 Healthy homes module for weatherization: The Office is negotiating with DOE to support the development of an electronic assessment tool that could be used by weatherization programs to expand their initial assessments to include additional residential health and safety measures (e.g., checklist for lead-safe work practices, pest infestation, possible additional IAQ modeling). The module would be piloted by five programs throughout the U.S. HUD contact: Peter Ashley: peter.j.ashley@hud.gov

1.6.3 OHHLHC Notices of Funding Availability (NOFAs). The Office's Lead Hazard Control Programs NOFA was announced in the Federal Register, with the full text NOFA available on the OHHLHC web site at: http://www.hud.gov/offices/lead/09NOFA/leadcombo.cfm. A total of $69 million is available for the Lead Hazard

Control Grant Program and $48 million is available for the Lead Hazard Reduction Demonstration Grant Program. Applications must be received or postmarked by July 20, 2009. NOFAs that are yet to be announced include:

Healthy Homes Demonstration Grant Program (~ $6 million)
Healthy Homes Technical Studies Grant Program (~ $4 million)
Green and Healthy Homes Technical Studies Program (~ $2 million)
Lead Hazard Control Capacity Building (~ $1.2 million)
HUD contacts: See contact information in individual NOFAs

1.6.4 Update of Healthy Homes Program Strategic Plan. The Office has completed updating the strategic plan for the Healthy Homes Program. The plan will be available from the OHHLHC we site on June 9th (in conjunction with the release of the Surgeon General's Call-to-Action on Healthy Homes). See: http://www.hud.gov/offices/lead

1.7 EPA-Environmental Protection Agency - Indoor Environments Division (IED)

EPA's update was divided into four parts:
1 - Asthma
2 - Partnership for Clean Indoor Air (PCIA)
3 - Indoor airPLUS
4 - Indoor Air Quality Scientific Findings Resource Bank Website

1.7.1 Asthma (POC: Alisa Smith; 202-343-9372, smith.alisa@epa.gov)

1.7.1.1 National Asthma Forum and Awards Ceremony. The Indoor Environments Division (IED) will host the *Communities in Action for Asthma Friendly Environments* National Asthma Forum on June 4-5 in Washington DC. EPA Administrator Jackson will provide opening remarks on the morning of June 5th, to start the second day of the Forum. The Forum convenes hundreds of community asthma care leaders from around the U.S. including health care plan faculty, health care provider organizations, and program representatives in the EPA *Communities in Action for Asthma Friendly Environments* Network. As the annual pacing event for the Network, the Forum provides leadership development, networking, peer-to-peer learning, and sharing best practices in comprehensive asthma care. An awards ceremony of the competitive 2009 National Environmental Leadership Awards in Asthma Management presentations will be held with five programs receiving recognition of their outstanding work to improve health outcomes for individuals and families.

1.7.1.2 Asthma Awareness Month and World Asthma Day. May was Asthma Awareness Month! The Indoor Environments Division (IED) and EPA Regional offices supported community outreach efforts as World Asthma Day (May 5) and Asthma Awareness Month was celebrated across the country. On May 6, the IED Asthma Team joined the Asthma and Allergy Network-Mothers of Asthmatics (AAN-MA) at an Asthma and Allergy Health Fair and Exhibit at the Rayburn House Office Building in Washington DC.

1.7.1.3 Asthma Disparities Summit. The Community Asthma Prevention Program (CAPP) of Children's Hospital of Philadelphia (CHOP) hosted a day long summit & panel discussion on Monday, March 30. The event was designed to identify and update actionable strategies and policies for addressing asthma disparities across Philadelphia. CAPP is a community based asthma care program that is supported by EPA, CDC, and the Merck Foundation. Using a combination of evidence based clinical care, environmental risk reduction, and family education, CAPP is improving asthma health outcomes for low income African American and Puerto Rican families in metro Philadelphia.

1.7.1.4 American Academy of Allergy, Asthma and Immunology (AAAAI) Annual Meeting. Alisa Smith of the Indoor Environments Division (IED) participated in the AAAAI Annual Meeting on March 13-17 in Washington DC. Alisa co-chaired the Indoor Allergen Subcommittee meeting and participated in sessions of the Air Pollution, and Health Outcomes, Education, Delivery and Quality Subcommittees. The AAAAI meeting had 1000+ presentations and drew over 7,000 attendees; including allergist/immunologists, allied physicians and health professionals, industry representatives and clinical leaders in showcasing new research and discussion of developments in allergy, asthma

and immunologic diseases. Highlights of the meeting include the Environmental Health Forum and keynote address by Dr. Kevin Weiss, a leading asthma advocate.

1.7.2 Partnership for Clean Indoor Air (PCIA) (POC: Brenda Doroski; 202-343-9764, Doroski.brenda@epa.gov)
Biennial Partnership for Clean Indoor Air Forum. The 4th Biennial Partnership for Clean Indoor Air Forum was held in Kampala, Uganda March 23-28, 2009. At the world's largest household energy and health event, more than 260 energy and health experts from 38 countries gathered to report on their extraordinary results, celebrate their breakthrough achievements, and commit to attaining bold future goals. The Forum is designed to increase Partnership collaboration, strengthen initiatives, advance best practices for household energy programs, and raise worldwide visibility of successful efforts. The PCIA mission is to reduce exposure to air pollution from household energy use, primarily among women and children. Partners reported that in 2008 more than 8 million people were living in homes that had adopted improved cooking technologies. This is double the results from 2007, and more than 4 times the results from 2006. The Partnership for Clean indoor Air is committed to continuing this breakthrough rate of growth in the future.

1.7.3 Indoor airPLUS (POC: Eric Werling; 202-343-9495, Werling.eric@epa.gov)
EPA's Indoor airPLUS program, developed in collaboration with ENERGY STAR for Homes, is now official. Program materials were finalized, approved and released in April. Visit the new Indoor airPLUS website - www.epa.gov/indoorairplus. Indoor airPLUS is a new EPA partnership program designed to recognize new homes equipped with a comprehensive set of Indoor Air Quality (IAQ) features.

1.7.4 Indoor Air Quality Scientific Findings Resource Bank Website
(POC: Greg Brunner; 202-343-9052, brunner.gregory@epa.gov)
Indoor Air Quality Scientific Findings Resource Bank Website. The U.S. EPA Indoor Environments Division is pleased to announce significant upgrades to the Indoor Air Quality Scientific Findings Resource Bank website. The website, initially launched in April 2008, was developed by scientists at the Lawrence Berkeley National Lab under an interagency agreement funded by the EPA. The web site contains information on relationships between IAQ and people's health and work performance. The recent web site upgrades include:

- An extensive new section, *Indoor Dampness, Biological Contaminants and Health* (replacing a prior short summary section on this topic);
- An expansion of the *Health and Economic Impacts of Building Ventilation* section to include new information relating ventilation rates in office buildings to sick building symptoms, including a downloadable peer-reviewed journal article;
- The ability to display web pages with data in metric units; and
- A new convenient web address, www.iaqscience.lbl.gov (Note: the old web address is also still valid).

2-GAO Report-Recommendations on Mold Research and Public Guidance. In addition to these minutes, the discussion was recorded and is available on the CIAQ website (MP3, 18:16 minutes, 25 M). Jalbert briefly reviewed the discussion from the February 18th meeting. The GAO response to the question of study scope was read aloud and can be found at Q6 in the February 18th minutes. Jalbert reminded everyone about the commitment made in February to the process being as transparent as possible. There were no questions about the GAO related meeting minutes.

Jalbert reminded the group as to the purpose for the Mold Work Group (MWG), i.e., to implement the GAO recommendations, and that expectations that some external parties had for going beyond that charge needed to be moderated. The key action item or agreement resulting from the February 18th meeting was to form a mold work group comprised of representatives from the agencies indentified by GAO or that also asked or volunteered to participate given their mold related mission.

The GAO recommendations (http://www.gao.gov/products/GAO-08-980) on research and public guidance were first discussed at the February 18th meeting (www.epa.gov/iaq/ciaq/meetingschedule.html). As discussed in February, the intent is to effectively implement the recommendations in a transparent manner. The Institute of Medicine (IOM) identified gaps in research, scientific uncertainties and health effects will not be debated in this meeting.

These agencies were contacted and asked to designate a point of contact and MWG member. The MWG agency membership and representatives will probably change over time as needs dictate. It was agreed that only the names of the members would be included in these minutes. Consequently, the MWG is currently comprised of the following people (and agencies).

CIAQ Mold Work Group (MWG) Members*
HHS-CDC-NIOSH (DRDH-HHE): Dr. Jean Cox-Ganser and Dr. Ju-Hyeong Park
HHS-CDC-NIOSH (HELD-ACIB): Dr. Brett Green and Dr. Don Beezhold (Chief, Allergy and Clinical Immunology Branch)
HHS-CDC-NCEH: Dr. Paul Garbe and Dr. Fuyuen Yip
HHS-NIH-NIEHS: Dr. Dori Germolec (Dr. Kim Gray)
HHS-NIH-NHLBI: Dr. James Kiley
HUD-OHHLHC: Dr. Peter Ashley and Rachel Riley
EPA-Indoor Environments, ORIA-OAR: Laura Kolb and Philip Jalbert
EPA-Office of Research & Development (ORD): Dr. Timothy Dean and Dr. Marsha Ward
DHS: Peter Wixted and David Chawaga (FEMA)
CPSC: Dr. Joanna Matheson
---
*HHS-NIH-NIAID (DAIT-OPP): Sarah Landry (At this time NIAID is an observer)

The MWG was invited to participate in a short conference call on June 2nd to prepare for the June 3rd CIAQ meeting and summarize activities to date. Outcomes from the June 2nd conference call included:
(1) Agreement to hold a follow-on MWG meeting (date TBD) prior to the October CIAQ meeting.
(2) To solicit ideas and suggestions for the next MWG meeting agenda from the members.
(3) Some early discussion of member agencies providing financial support to the MWG effort.
(4) Agreement to treat Guidance and Research as separate topics. The idea of using a Messaging Matrix approach for the Guidance related activity was suggested by Rachel Riley of HUD.
(5) A cursory discussion of how public the existing agency research agendas are, e.g., NIOSH-NORA-National Occupational Research Agenda.
(6) What (if any) coordinating mechanisms exist at various levels within Departments, Agencies, etc., e.g., NIOSH has research councils in eight (8) industry sectors.

(D) H1N1 Influenza Presentation. Transmission of Flu Viruses in Indoor Air: HVAC System Protection Options, by Steven Welty. The presentation will look at the stages of infectious droplets and droplet nuclei, how flu viruses are distributed and circulated within office buildings, the conditions that affect virus longevity, and the effectiveness of the technologies and systems available to sterilize or capture flu viruses. The full presentation (pdf and MP3 audio) is available on the CIAQ website (www.epa.gov/iaq/ciaq/meetingschedule).
Note - John Wimer of the **National Center for Energy Management and Building Technologies** (NCEMBT) provided the following link for information on in-duct air cleaners that were discussed during the H1N1 presentation -
http://www.ncembt.org/portal/Portals/0/downloads/Pei_J_Residential_In-duct%20Air%20Cleaners_NCEMBT-090213.pdf

(E) Q&A: Agency Updates & GAO Mold Report. These participant questions were answered by Philip Jalbert.

Q1: Is there a date set that the working group will come together to start moving with the recommendations in regards to the GAO Indoor Mold Report? [John McBride] [moldleg333@live.com] [Q: 12:54 PM]
Answer: A preliminary mold workgroup (MWG) meeting was held June 2nd just prior to the June 3rd meeting of the CIAQ. Please see the minutes for details. A second MWG meeting is anticipated for late September or early October. The next CIAQ meeting

is Wednesday, October 21st.

Q2: Can you comment on why Canada's new radon standard is still higher than ours (if I understood you correctly), while the British new standard is lower than ours? Also, with the WHO release, will there be an attempt to standardize? [Nancy Bernard] [nancy.bernard@doh.wa.gov] [Q: 1:11 PM]
Answer: As you know the U.S. action level for radon is 4pCi/L or 148Bq/m3, Canada's is 5pCi/L or 200Bq/m3. Health Canada chose their action level after a lengthy and public process. See what Health Canada has to say about radon here http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/environ/radon-eng.php. The UK reference level (similar to the US action level) is 200 Bq/m3. However, on June 3rd the independent expert Advisory Group on Ionising Radiation to the UK Health Protection Agency recommended lowering the UK reference level by 50% to 100Bq/m3 or 2.7pCi/L. Although not official yet, the WHO recommendation contained in the Radon Handbook to be released in September recommends countries consider a reference level of 100Bq/m3. That recommendation, from such a respected global health organization, may very well encourage countries with an existing action/reference level to reconsider their radon policies.

Q3: What will HHS say about formaldehyde in the home? Will HHS recommend steps to reduce in-home formaldehyde exposure - especially indoor air pollution via source reduction? [Bruce Ray] [bruce.ray@jm.com] [Q: 1:19 PM]
Answer: The Surgeon General's Call-to-Action (CTA) on Healthy Homes does promote the idea that healthy or green homes will use zero or low-emitting materials. The CTA does specifically mention formaldehyde; and says that improving air quality depends (in part) upon using low-emitting building materials such as wood products that emit low levels of formaldehyde (e.g., see Section 3 on healthy homes, page 19). The CTA is available online at http://www.surgeongeneral.gov/topics/healthyhomes/index.html.

Q4: Is information on the interim remediation plan for drywall available for review? [David Shore] [dshore@eheinc.com] [Q: 1:47 PM] [A: 9:17 AM]
Answer: Draft documents were discussed among members of the Florida Incident Management Team (IMT), though none was officially approved. Remediation is outside of the scope of the Florida Department of Health. CPSC is the lead Federal agency on this topic and is being assisted by CDC and EPA, among others. Two good information sources on "imported drywall" are the CPSC and State of Florida DOH websites: CPSC: http://www.cpsc.gov/info/drywall/index.html (sign-up to receive "drywall" email alerts) Florida DOH: http://www.doh.state.fl.us/environment/community/indoor-air/drywall.html

Q5: FYI Re: Canada (NRC/IRC)-Indoor Air Initiative: http://irc.nrc-cnrc.gc.ca/ie/iaq/initiative_e.html [Robert Bean] [info@healthyheating.com] [Q: 2:28 PM]
Answer: For more on Health Canada's Indoor Air Initiative visit http://www.nrc-cnrc.gc.ca/eng/projects/irc/air-initiative.html and for more on Health Canada's companion program on their Healthy Buildings Initiative visit http://www.nrc-cnrc.gc.ca/eng/ibp/irc/health/healthy-buildings.html

Q6: Will there be any non-governmental (mold work group) committee members, i.e., IAQ industry professionals in the private sector? [Cathy Smith] [catsmith@att.net] [Q: 2:59 PM]
Answer: The role of public participation will be reviewed by the work group as it relates to each of the two main tasks, i.e., consistent public guidance and coordination and priorities for mold research. Most agencies have some type of policy regarding public involvement in agency activities, beyond what is required by statutes such as the Administrative Procedures Act. As stated previously, information will be made available as work progresses.