ASHRAE, INC.
1791 Tullie Circle, NE / Atlanta, GA 30329
404-636-8400

TC/TG/TRG MINUTES COVER SHEET

(These were approved at the Denver 2013 Annual Meeting)

(Minutes of TC/TG/TRG Meetings are to be distributed to those listed below within 60 days after the meeting.)

TC/TG/TRG NO.: **TC 1.12**

TC/TG/TRG TITLE: **Moisture Management in Buildings**

DATE OF MEETING: **January 26, 2013, 1pm to 3pm**.

LOCATION: **Dallas Convention Center, Dallas, TX, Ball Room A3**

MEMBERS PRESENT	**TERM EXPIRES 6-30**	**MEMBERS ABSENT**	**TERM EXPIRES 6-30**	**EX-OFFICIO MEMBERS**
Lew Harriman III	2013	Quinn Hart	2016	Victor Penar
Ray Patenaude	2016	Andreas Holm	2012	
Alex McGowan	2015	Achilles Karagiozis	2013	
Raoul Webb	2014			
Steven Cornick	2013			
Hugo Hens	2013			
Lan Chi Nguyen Thi	2015			
Paul Shipp	2013			
George DuBose	2016			
Stan Gatland	2016			
Norm Nelson	2016			
Florian Antreter	2016			
CORRESPONDING MEMBERS PRESENT		**CORRESPONDING MEMBERS ABSENT (CONTINUED)**		**ADDITIONAL ATTENDANCE**
Hartwig Künzel		Andre Desjarlais		John G. Davis
Gordon Hart		Larry Elkin		Manfred Kehrer
Stan Gatland		Diana Fisler		Christy Cronin
Wahid Maref		Sam Glass		William Chadwick
Anton TenWolde		Manfred Gerber? (Kehrer?)		Claud Kissman
Jeff Traylor		Michael Hayes		Elliott Horner
Fitsum Tariku		Ron Bailey		John Bloemer
Mika Salonvaara		Dale Herron		
CORRESPONDING MEMBERS ABSENT		Gil Avery		**ADDITIONAL DISTRIBUTION**
Rodney Lewis		Albert Pucino	**Section head**	Victor Penar
Mark M. Anderson		Carl Lawson	**TAC Chair**	Charles H Culp, III
Davidge Warfield		Mark Lawton	**Liasons**	
Bede Welford		Neil Leslie	**Mgr of Stds.**	Stephanie Reiniche
Ron Bailey		Him Ly	**Mgr of R&T**	Mike Vaughn
Joseph Griner, III (prov. CM)		John Murphy		
Fiona Aldous		Leonard Damiano		
Marcus Bianchi		Claudio Darras		
Holly Bailey		Doug Bibee		
Stephen Barefoot		Elia Sterling		
Jim Cummings		Theresa Weston		

TC 1.12 Moisture Management in Buildings

January 26, 2013, 1pm to3pm.

Dallas Convention Center, Dallas, TX, Ball Room A3

1. **Call to order – Lew Harriman III – Chair**

   Chair called meeting to order at 1:05 PM and read the TC 1.12 mission statement.

2. **Self-Introduction of members and guests – Lew Harriman**

   Those present introduced themselves. Quorum was established.

3. **Review agenda – Lew Harriman**

   There was one addition to the agenda: discussion of TC 4.4 RTAR for cosponsorship.

4. **Chairman's report – Lew Harriman**

   The chair had no items to report.

5. **Program – Alex McGowan ----------**

a. Dallas (January 26 – 30, 2013)

The following sessions were being presented at the Dallas meeting of interest to TC 01.12:

i. A Seminar, "Diagnosing and Fixing Building Moisture Problems – Case Histories from Hot and Humid Climates", Steve Cornick, Chair, 8:00 – 9:30 a.m. Sunday, Jan. 27. **Sponsored by TC 01.12**
   (a) "Diagnosing & Fixing a Major Mold Growth Problem in a Health Clinic", Lew Harriman
   (b) "The Unintended Consequences of the New IGCC (Green Code) On HVAC and Mold Problems in Humid Climates", George Dubose
   (c) "Sources and Solutions of Classic Moisture Problems – Lessons Learned in Hot & Humid Climates", Raoul Webb

ii. A Seminar, "Moisture Control in Commissioning of New and Existing Buildings", Mike Eardley, Chair, 11 – 12:30 Sunday, Jan. 27. **Sponsored by TC 07.09**
   (a) "Providing Moisture Control Solutions in Building Commissioning", Donald Snell
   (b) "The Art and Science of Building Enclosure Commissioning", Fiona Aldous

iii. A Seminar entitled "What Mechanical Engineers Need to Know about Envelopes for High Performance Buildings" Peter Adams, Chair, 1:30 – 3:00 p.m. Sunday, Jan. 27. **Sponsored by TC 04.04**
   (a) "Heat, Air, and Moisture Migration in Building Enclosures", Alex McGowan
   (b) "Interior Building Environments and Their Impacts On Building Enclosures", Hugo Hens
   (c) "Designing Retrofit Systems for Existing Buildings", Sean O'Brien

b. Proposed for Denver (June 22 – 26, 2013)

i. Seminar: "World-wide measured values of indoor humidity;" Chair Steve Cornick. Potential speakers: Sam Glass, Hugo Hens, Florian Antreter, Achilles Karagiozis.

ii. Seminar: "Tools and techniques for avoiding construction moisture problems" Chair Anton TenWolde. Potential speakers: Lew Harriman (drying), Hugo Hens (masonry construction), Wahid Maref (wood-frame high-rise), Stan Gatland (materials shipped from other locations)

Deadlines for technical and conference paper deadlines for Denver have passed. Proposals for seminars and forums are due **February 11, 2013**.

c. Proposed for New York City (January 18 – 22, 2014)

i. Conference paper session: "Hygric buffering to save energy and control humidity in buildings." Chair Hugo Hens. Potential speakers: Dane Christiansen (2 papers), Florian Antreter, Achilles Karagiozis.

ii. Seminar: "Designing for Disaster" Chair Lew Harriman. Potential speakers Elliott Warner: "ASTM procedures for materials that survive extreme events; Alex McGowan "Design for storm surge: you have to think upside-down"

iii. Seminar: "Lessons Learned From Hurricane Recovery", Chair Lew Harriman. Potential speakers: Gordon Hart and/or George Dubose on reusing materials, Raoul Webb on interfacing with agencies, person to be named later from Wiss, Janney, Elstner on the local experiences following Hurricane Sandy

Conference tracks for New York City are:

1. HVAC&R Systems and Equipment
2. HVAC&R Fundamentals and Applications
3. Environmental Health through Indoor Environmental Quality
4. Building Information Systems: Integrating Technology for Control, Management, Optimization and Efficiency
5. International Design
6. Building Performance and Commissioning for Operation and Management
7. Hydronic System Design for Efficiency and Large Buildings
8. Tall Buildings: Performance Meets Policy

6. Handbook – Hugo Hens

Hugo described the 4th proposed draft of the chapter titled "Fundamentals of Moisture Management" that is targeted for the 2017 Handbook of Fundamentals. He had received comments from Steve Cornick, Sam Glass, and Hartwig Künzel. Moisture release rates for residences and natatoriums are included, but data for industrial and other type of buildings are lacking. Only data for moderate cold climates are included for schools and dormitories. He again urged members to review and comment.

7. Research – Steve Cornick

a. Status update – TC 8.10 1565-RP "DOAS Design Guide" – Harriman
TC 1.12 is a co-sponsor – The project is on track. There have been two teleconference meetings to date and the first Project Management Subcommittee meeting will occur in Dallas. The contractor has delivered a Table of Contents and a proposed layout to the PMS for comment as part of the first objective. The next task will be to prepare a definition of a Dedicated Outdoor Air System and begin to deliver the draft guide for review in installments of complete chapters.

b. New 8.10 RTAR – Develop a method to determine residential whole home dehumidification capacity requirements. - Harriman
TC 8.10 *Mechanical Dehumidifiers & Heat Pipes* is seeking co-sponsorship from TC 1.12 on an RTAR to *Develop a method to determine residential whole home dehumidification capacity requirements.* ASHRAE Standard 62.2 now calls for ventilation air to be provided residences. That coupled with the increased air tightness requirements make it essential determine the latent load to

properly size the equipment. Manufactures provide guidance for sizing, but vary on how calculations should be completed. Factors such as moisture capacity of the house, construction methods, air conditioning run times, and moisture removal capability can drastically affect and complicate sizing requirements. A motion to co-sponsor the RTAR was passed 11/0/0 (CNV).

c. Potential new RTAR's – The top four ideas resulting from the brainstorm in San Antonio as listed in the minutes were reviewed
    i. *Techniques for Limiting Indoor Dampness and Microbial Growth During Unoccupied Hours and In Buildings That are Seasonally Occupied* – Lew Harriman
    ii. *Techniques for Minimizing Construction Moisture Problems* – Anton TenWolde, Hugo Hens, Sam Glass, Therese Stovall.
    iii. *Humidity Loads Generated in Non-residential Buildings* – Theresa Weston, Anton TenWolde, Sam Glass, Raoul Webb
    iv. *Techniques for Limiting Indoor Dampness and Microbial Growth in Heritage and Special-purpose Buildings* – Steve Cornick

   Cornick pointed out that a work statement can be written without first generating an RTAR.

d. New RTAR's
    i. Lew Harriman presented a draft of new RTAR Damp Building Measurement Criteria and Inspection Protocol (to assist determination of when a building is dry enough to avoid dampness-related health risks). This RTAR is a direct consequence of ASHRAE's new mold position document. The RTAR is posted on the group's Google Site. Lew is asking for all the members to read the draft and submit comments directly to him by April 1st, 2013. The RTAR will be further developed at the Denver meeting by Lew.
    ii. Manfred Kehrer from Oak Ridge National Laboratory gave a summary of a proposed RTAR on developing a method for measuring water vapour permeance of asphalt roof shingles. This will be presented to TC 4.4 for discussion in Dallas and they are inquiring as whether the TC is interesting in co-sponsoring the work. The research subcommittee will wait to see the response of TC 4.4 before considering the RTAR.

8. Minutes of the June 2012 meeting.

The minutes were approved with the following correction: Anton TenWolde is not a voting member.(9/0/1, McGowan abstained because he was not present at that meeting, CNV)

9. Old Business – Lew Harriman

a. Lew Harriman reported that ASHRAE's Mold Position document has been approved by the Board.

b. Lew Harriman discussed the TC's response to the invitation from the Std 62 committee to suggest a dew point maximum in place of (or to supplement) the current recommendation for maximum 60%RH in air conditioned buildings. This issue will be further discussed in Denver.

10. New Business – Lew Harriman

a. Lew Harriman described that he had found serious discrepancies between the ACCA Manual J methodology and the ASHRAE Dew Point Design method for residential load calculations, with Manual J significantly underestimating the potential latent load. This issue will be further discussed in Denver.

b. Lew Harriman reported that he had been asked by the Board to develop a definition of a damp building. There was general consensus the TC1.12 should take the lead on this. This issue will be further discussed in Denver.

11. **Mini-Presentation – NIOSH Building Moisture & Mold Evaluation Protocol – Cmdr. Steve Martin, U.S. Public Health Service** (See Steve's attached PowerPoint slides)

12. **Adjourn –** The meeting was adjourned at 3 PM

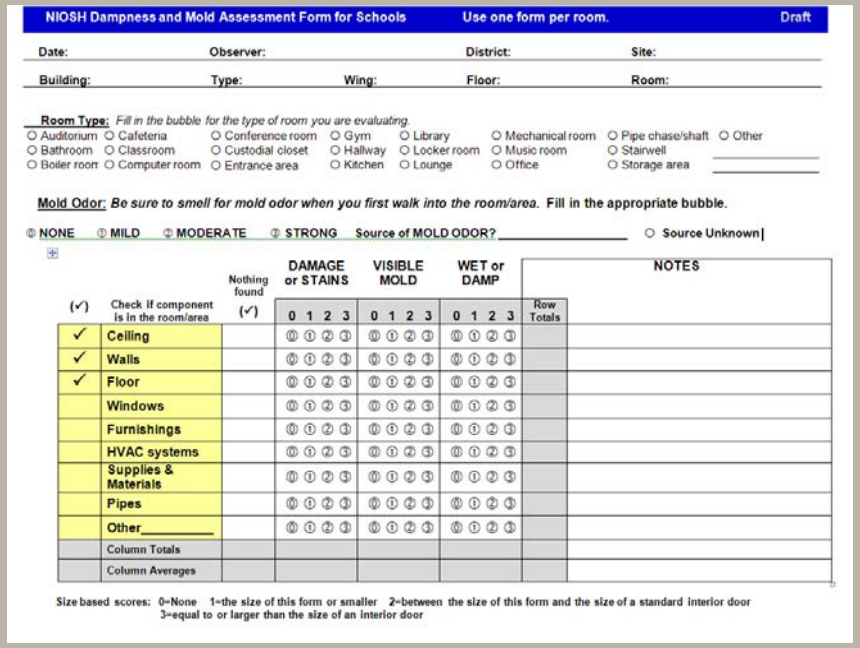
Next meeting: Denver, Saturday June 22, 2013 - 13:00 – 15:00

Action items as of June 2012

WHO	ITEM	DEADLINE
Anderson	Gather input from Std 62 subcommittee members, organize it, discuss it and report with recommendation to the full committee on the question of changing the max rh recommendation in std 62 to a max dew point recommendation	
All	Send appropriate material for the Handbook chapter to Hugo	June 2013
Harriman	Draft an outline for a chapter in the APPLICATIONS volume of the handbook that is focused on common problems and solutions in moisture management. (Outline partly based on work of the Mold Position Document Revision Committee)	October 15th, 2012
Maref	Submit a conference paper session entitled "World-wide measured values of indoor humidity" for Denver	January 2013
Hens	Submit a conference paper session entitled "Hygric buffering to save energy and control humidity in buildings." For New York	July 2013
Harriman	Develop RTAR "*Techniques for Limiting Indoor Dampness and Microbial Growth During Unoccupied Hours and In Buildings That are Seasonally Occupied* "	June 2013
TenWolde	Develop RTAR "*Techniques for Minimizing Construction Moisture Problems"*	June 2013
Weston	Develop RTAR "*Humidity Loads Generated in Non-residential Buildings*"	June 2013
Cornick	Develop RTAR "*Techniques for Limiting Indoor Dampness and Microbial Growth in Heritage and Special-purpose Buildings"*	June 2013
Harriman	Notify TC 4.1 (Load Calculation Data & Procedures) that Sam Glass' research strongly suggests that current internal humidity load equation in the ASHRAE handbook severely underestimates the observed data, and that TC 1.12 respectfully suggests that TC 4.1 re-evaluate the values generated by equation 31 of chapter 17 of the 2009 FUNDAMENTALS in light of this fact.	Status?

Minutes prepared by A. tenWolde

NIOSH Dampness and Mold Assessment Tool



NIOSH Dampness and Mold Assessment Form for Schools — **Use one form per room.** — **Draft**

Date: Observer: District: Site:

Building: Type: Wing: Floor: Room:

Room Type: *Fill in the bubble for the type of room you are evaluating.*

○ Auditorium ○ Cafeteria ○ Conference room ○ Gym ○ Library ○ Mechanical room ○ Pipe chase/shaft ○ Other
○ Bathroom ○ Classroom ○ Custodial closet ○ Hallway ○ Locker room ○ Music room ○ Stairwell
○ Boiler room ○ Computer room ○ Entrance area ○ Kitchen ○ Lounge ○ Office ○ Storage area _____

Mold Odor: ***Be sure to smell for mold odor when you first walk into the room/area.*** **Fill in the appropriate bubble.**

⓪ NONE ① MILD ② MODERATE ③ STRONG Source of MOLD ODOR? _____ ○ Source Unknown

(✓)	Check if component is in the room/area	Nothing found (✓)	DAMAGE or STAINS 0 1 2 3	VISIBLE MOLD 0 1 2 3	WET or DAMP 0 1 2 3	Row Totals	NOTES
✓	Ceiling		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
✓	Walls		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
✓	Floor		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Windows		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Furnishings		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	HVAC systems		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Supplies & Materials		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Pipes		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Other_____		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Column Totals						
	Column Averages						

Size based scores: 0=None 1=the size of this form or smaller 2=between the size of this form and the size of a standard interior door 3=equal to or larger than the size of an interior door

National Institute for
Occupational Safety and Health (NIOSH)
Division of Respiratory Disease Studies
Morgantown, WV

National Institute for Occupational Safety and Health NIOSH

CDC SAFER • HEALTHIER • PEOPLE™

Dampness and Mold

- NIOSH Health Hazard Evaluation Program
  - 1 in every 3 evaluation requests is related to dampness or mold.
- Major weather events
  - Hurricanes Katrina, Sandy, etc.

Observational Assessment for Dampness and Mold

- Usefulness of the observational assessment method:
  - Observational assessment scores were correlated with environmental sample measurements
  - Exposure index based on observational assessment was a good predictor of respiratory diseases in building occupants
- NIOSH publications:

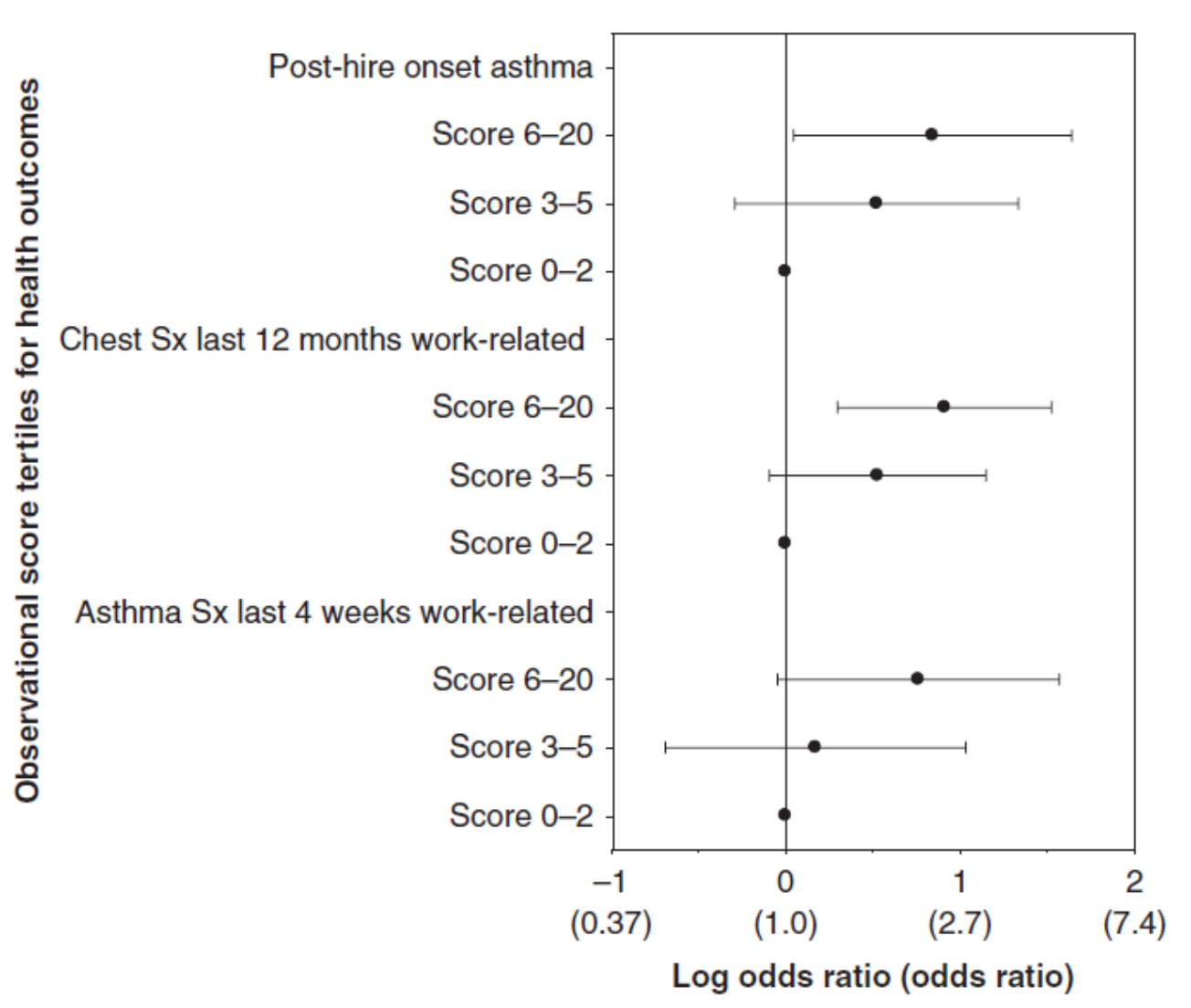
Cox-Ganser JM, Rao CY, Park J-H, Schumpert JC, Kreiss K [2009]. ***Asthma and respiratory symptoms in hospital workers related to dampness and biological contaminants.*** Indoor Air 19(4): 280-90.

Park JH, Schleiff PL, Attfield MD, Cox-Ganser JM, Kreiss K. [2004]. ***Building-related respiratory symptoms can be predicted with Semi-quantitative indices of exposure to dampness and mold.*** Indoor Air 14: 425-433.

Hospital Study in 2000

- Six asthma cases among 50 staff on top (8th) floor of a hospital
  - Onset between 1997 and 1999
  - Methacholine challenge positive
  - Peak flow diaries show work-related changes
  - Latex asthma excluded by negative tests for latex-specific IgE antibodies
- History of water incursions and evidence of fungal contamination in the walls and ceiling of top floors of the hospital

Work-related lower respiratory symptoms and asthma in relation to dampness score Hospital study



Models adjusted for age, gender, smoking status, and reported mold or dampness at home

Association between observational score and environmental measurements

- Rooms with scores above the median had significantly higher floor dust levels of:
  - Total culturable fungi
  - Total culturable bacteria
  - β-D-Glucan
  - Ergosterol
- Moisture content of walls and flooring higher in rooms with scores above the median

NIOSH Dampness and Mold Assessment Form

NIOSH Dampness and Mold Assessment Form for Schools **Use one form per room.** **Draft**

Date: **Observer:** **District:** **Site:**

Building: **Type:** **Wing:** **Floor:** **Room:**

Room Type: *Fill in the bubble for the type of room you are evaluating.*

○ Auditorium	○ Cafeteria	○ Conference room	○ Gym	○ Library	○ Mechanical room	○ Pipe chase/shaft	○ Other
○ Bathroom	○ Classroom	○ Custodial closet	○ Hallway	○ Locker room	○ Music room	○ Stairwell	
○ Boiler room	○ Computer room	○ Entrance area	○ Kitchen	○ Lounge	○ Office	○ Storage area	

Mold Odor: ***Be sure to smell for mold odor when you first walk into the room/area.*** **Fill in the appropriate bubble.**

⓪ NONE ① MILD ② MODERATE ③ STRONG Source of MOLD ODOR? _____ ○ Source Unknown

(✓)	Check if component is in the room/area	Nothing found (✓)	DAMAGE or STAINS 0 1 2 3	VISIBLE MOLD 0 1 2 3	WET or DAMP 0 1 2 3	Row Totals	NOTES
✓	Ceiling		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
✓	Walls		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
✓	Floor		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Windows		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Furnishings		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	HVAC systems		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Supplies & Materials		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Pipes		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Other_____		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③		
	Column Totals						
	Column Averages						

Size based scores: 0=None 1=the size of this form or smaller 2=between the size of this form and the size of a standard interior door 3=equal to or larger than the size of an interior door

Purpose of the Dampness and Mold Assessment Tool

- Identify and record areas of dampness or mold throughout your building.
- Trigger early repair and remediation to avoid potential health effects and more costly repair and remediation.
- Create awareness of potential problem areas.
- Track (monitor) past and present problem areas by repeating the use of this tool at the frequency which your individual facility determines.

Who should use the Dampness and Mold Assessment Tool

- Facilities personnel and/or others trained to use the tool.

  - Informed on how to determine mold odors.
  - Aware of room components
  - Know the scoring system

Scoring

(✓)	Check if component is in the room/area	Nothing found (✓)	DAMAGE or STAINS 0 1 2 3	VISIBLE MOLD 0 1 2 3	WET or DAMP 0 1 2 3	Row Totals
✓	Ceiling		⓪ ● ② ③	● ① ② ③	⓪ ● ② ③	2
✓	Walls		⓪ ① ② ●	● ① ② ③	⓪ ① ● ③	5
✓	Floor		⓪ ① ② ●	● ① ② ③	⓪ ① ② ●	6
✓	Windows	✓	⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	
✓	Furnishings		● ① ② ③	⓪ ① ② ●	● ① ② ③	3
✓	HVAC systems	✓	⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	
✓	Supplies & Materials		⓪ ● ② ③	● ① ② ③	⓪ ● ② ③	2
✓	Pipes	✓	⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	
	Other_____		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	
	Column Totals		8	3	7	18
	Column Averages		**1.0**	**0.375**	**0.875**	**0.75**

Software


NIOSH Dampness and Mold Assessment Tool
Site Setup
Perform New Assessment
View/Edit Completed Assessments
Export Raw Data to Excel
Reports
Backup Database to Removable Media
Import Assessments from External Device
Exit

Site Set-Up

Site Setup

Districts

Philadelphia

Sites Within District

Site ID	Name	Address1	Address2	City	State	Zip	Phone
B004101	Parent-Infant Center						
B101001	Bartram						
B101601	Bartram Garage						
B101901	Bartram Field						
B102001	West Philadelphia (						
B102002	West Philadelphia						
B102202	West Philadelphia A						
B102901	West Philadelphia F						
B103001	School of the Future						
B105001	Robeson						
B106001	Communications Te						
B108001	University City						

Buildings at Site

Building Name	Building Type

Wings of Building

Wing Name

Floors in Wing

Floor Name

Rooms on Floor

RoomName	RoomType

Save Changes

Cancel

Perform New Assessment

NIOSH Dampness and Mold Assessment Form - New Assessment

Date: 1/23/2013 Observer: District:

Site: Building:

Wing: Floor: Room:

Room Type: Fill in the bubble for the type of room you are assessing.

Auditorium	Classroom	Gym	Locker Room	Pipe chase/shaft
Bathroom	Conference Room	Hallway	Lounge	Stairwell
Boiler room	Custodial closet	Kitchen	Mechanical Room	Storage
Cafeteria	Entrance Area	Library	Office	Other

Notes...

NIOSH Dampness and Mold Assessment Form - New Assessment

Be sure to smell for mold odor when you first walk into the room/area.

Fill in the appropriate bubble.

MOLD ODOR: NONE MILD MODERATE STRONG

Source of MOLD ODOR? Source Unknown

Notes...

Back Next

NIOSH Dampness and Mold Assessment Form - New Assessment

(✓)	Check if component is in the room/area	Nothing Found (✓)	DAMAGE or STAINS 0 1 2 3	VISIBLE MOLD 0 1 2 3	WET or DAMP 0 1 2 3	Totals	Flaky	Notes
✓	Ceiling		⓪ ● ② ③	⓪ ① ② ③	⓪ ① ② ③	1		+
	Walls		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	0		+
	Floors		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	0		+
	Windows		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	0		+
	Furnishings		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	0		
	HVAC systems		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	0		+
	Supplies & Materials		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	0		
	Pipes		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	0		
	Other Type Other Here		⓪ ① ② ③	⓪ ① ② ③	⓪ ① ② ③	0		
			1.0	0.0	0.0	1.0		
			1.0	0.0	0.0	0.3		

Size based scores:

0 = NONE
1 = the size of a standard sheet of paper (8 1/2 x 11) or smaller
2 = between the size of this form and the size of a standard interior door
3 = equal to or larger than the size of an interior door

Notes... Save And Exit Save And Continue Back

Cancel Entering New Assessment

View/Edit Completed Assessments

View/Edit Assessments

District

SiteID	SiteName
B004101	Parent-Infant Ce
B101001	Bartram
B101601	Bartram Garage
B101901	Bartram Field
B102001	West Philadelphi
B102002	West Philadelphi
B102202	West Philadelphi
B102901	West Philadelphi
B103001	School of the Fut
B105001	Robeson
B106001	Communications
B108001	University City
B110001	Sayre
B110002	Sayre Pool
B111001	Shaw
B112001	Sulzberger
B113001	Tilden
B115001	Pepper
B116001	Turner
B119001	Motivational HS
B120001	Barry
B121001	Belmont CS
B123001	Bryant
B125001	Catherine
B125101	Catherine Annex
B126001	Comegys
B127001	Drew

Building	Type
Primary	Middle/Jr. High

WingName
Main

Floor
1
2
3
4
5
Attic
Basement

Room
100
102
103
103 A
103-A Restroom
104
105

Date	Time	ObserverID	No Access	Mold Odor	Mold Odor Source	Total Room Score	Notes
4/30/2012		S. Williams	☐	0		2	

Present	Component	Nothing Found	Damage Or Stains	Visible Mold	Wet Or Damp	RowTotal	Flakey Paint	Notes
☑	Ceiling	☐	2	0	0	**2**	☐	
☑	Walls	☑	0	0	0	**0**	☐	
☑	Floors	☑	0	0	0	**0**	☐	
☑	Windows	☑	0	0	0	**0**	☐	
☑	Furnishings	☑	0	0	0	**0**	☐	
☐	HVAC systems	☑					☐	
☑	Supplies & Materials	☑	0	0	0	**0**	☐	
☑	Pipes	☑	0	0	0	**0**	☐	
☐	Other	☑					☐	
Column Totals			2	0	0	2		
Column Averages			0.3	0	0	0.1		

Save Changes

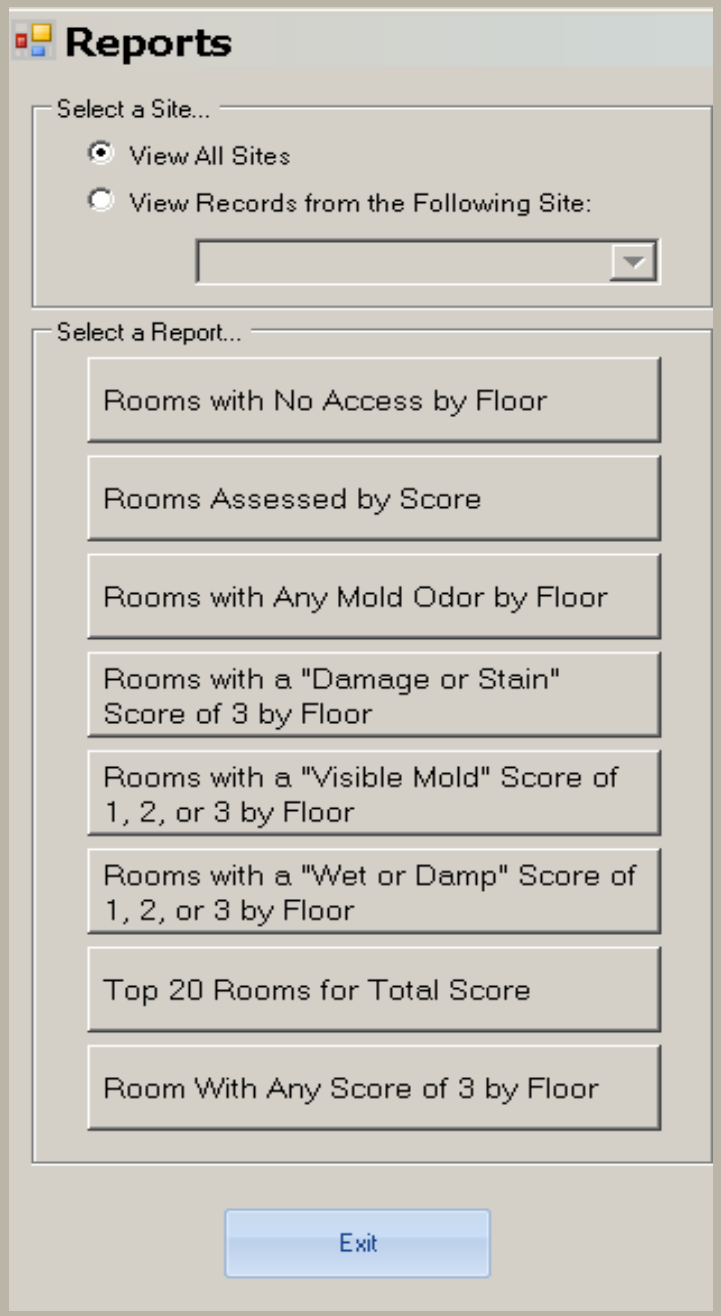
Exit

Export Raw Data to Excel

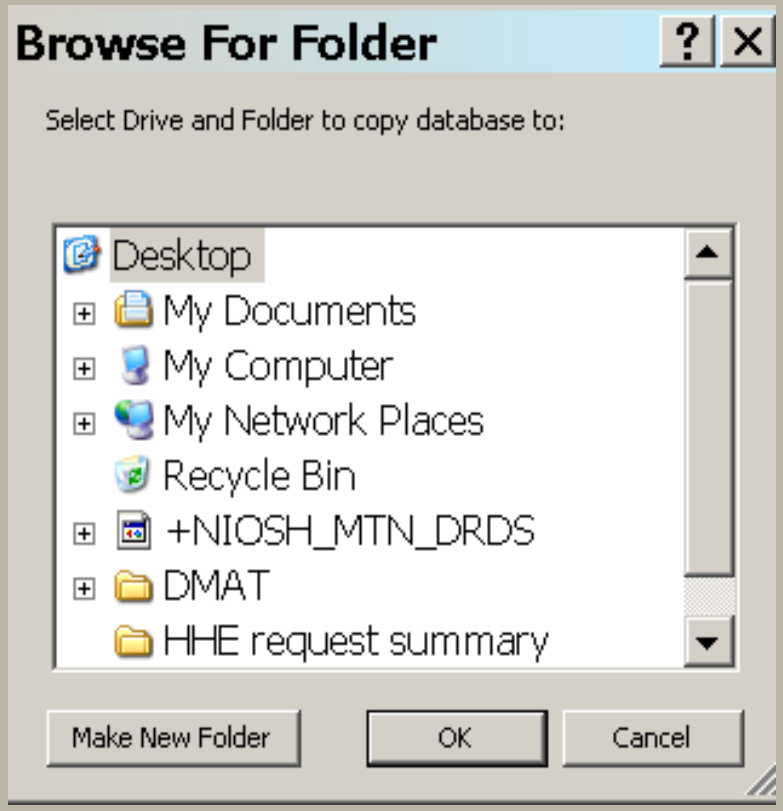
Assessment ID	Assessment Date	Observer	District	Site	Building
3_13_2012_15_10_46_16_31_B623001_123_36_138_393	3/13/2012 3:10:46 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_10_46_16_31_B623001_123_36_138_393	3/13/2012 3:10:46 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_10_46_16_31_B623001_123_36_138_393	3/13/2012 3:10:46 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_10_46_16_31_B623001_123_36_138_393	3/13/2012 3:10:46 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_10_46_16_31_B623001_123_36_138_393	3/13/2012 3:10:46 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_10_46_16_31_B623001_123_36_138_393	3/13/2012 3:10:46 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_10_46_16_31_B623001_123_36_138_393	3/13/2012 3:10:46 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_10_46_16_31_B623001_123_36_138_393	3/13/2012 3:10:46 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_10_46_16_31_B623001_123_36_138_393	3/13/2012 3:10:46 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_7_7_16_31_B623001_123_36_138_394	3/13/2012 3:07:07 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_7_7_16_31_B623001_123_36_138_394	3/13/2012 3:07:07 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_7_7_16_31_B623001_123_36_138_394	3/13/2012 3:07:07 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_7_7_16_31_B623001_123_36_138_394	3/13/2012 3:07:07 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_7_7_16_31_B623001_123_36_138_394	3/13/2012 3:07:07 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_7_7_16_31_B623001_123_36_138_394	3/13/2012 3:07:07 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_7_7_16_31_B623001_123_36_138_394	3/13/2012 3:07:07 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_7_7_16_31_B623001_123_36_138_394	3/13/2012 3:07:07 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_7_7_16_31_B623001_123_36_138_394	3/13/2012 3:07:07 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_8_36_16_31_B623001_123_36_138_395	3/13/2012 3:08:36 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_8_36_16_31_B623001_123_36_138_395	3/13/2012 3:08:36 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_8_36_16_31_B623001_123_36_138_395	3/13/2012 3:08:36 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary
3_13_2012_15_8_36_16_31_B623001_123_36_138_395	3/13/2012 3:08:36 PM	S. Williams	Philadelphia	B623001 - Fitler	Primary


Export Raw Data to Excel

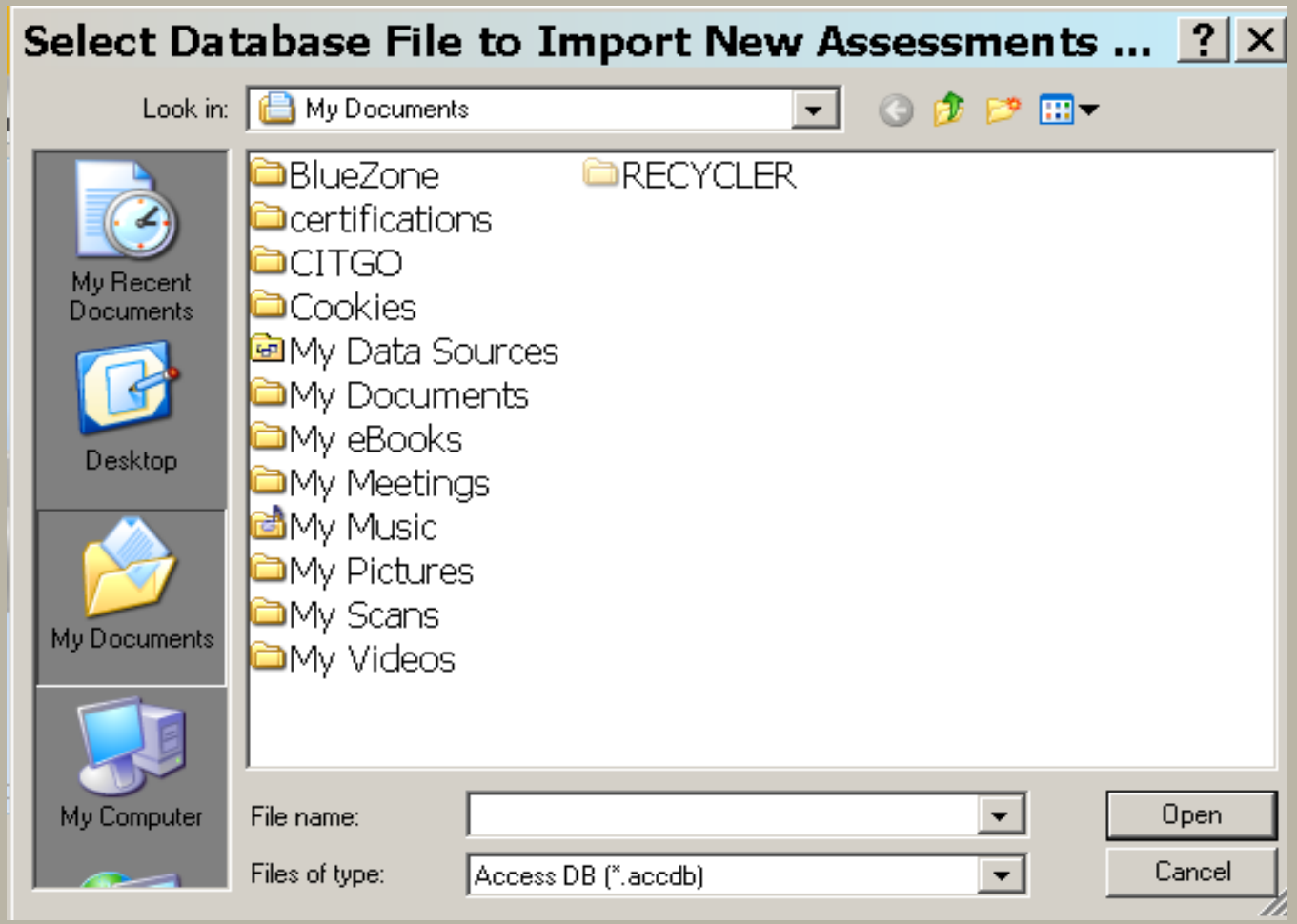
Reports


Reports
Select a Site...
View All Sites
View Records from the Following Site:
Select a Report...
Rooms with No Access by Floor
Rooms Assessed by Score
Rooms with Any Mold Odor by Floor
Rooms with a "Damage or Stain" Score of 3 by Floor
Rooms with a "Visible Mold" Score of 1, 2, or 3 by Floor
Rooms with a "Wet or Damp" Score of 1, 2, or 3 by Floor
Top 20 Rooms for Total Score
Room With Any Score of 3 by Floor
Exit

Backup Database to Removable Media



Import New Assessments



Future Plans for the Dampness and Mold Assessment Tool

Future plans for the tool include:

- Comprehensive manual, online help
- Beta-testing
- Additional health modules
- Dissemination via NIOSH Web-site
- Possible “apps” development (android, apple, win)
- Possible ventilation module
- Adapting tool to different building types
- Develop further understanding of cut points in relation to assessments and health

Contact Information

Michelle R. Martin
Public Health Advisor
CDC/NIOSH/DRDS/FSB
1095 Willowdale Road, M/S H-2800
Morgantown, WV 26505
(304) 285-5734
MRMartin1@cdc.gov