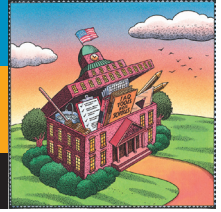


7th Annual

INDOOR AIR QUALITY TOOLS FOR SCHOOLS

NATIONAL SYMPOSIUM

DECEMBER 7-9, 2006, WASHINGTON, DC



AGENDA

Destination Healthy Kids: A Roadmap to Successful IAQ Management

December
Wednesday 6

5:00 - 7:00 pm RegistrationIndependence Foyer

December
Thursday 7

7:00 am Registration Opens

7:30 – 9:30 am Pre-Conference

GETTING STARTED: IAQ BASICS AND THE IAQ TFS KITIndependence A

This pre-conference session is designed for participants who are brand new to the *IAQ TFS* Program, or to IAQ issues in general. It will cover IAQ basics and provide an initial introduction to the *IAQ TFS* Kit. Presenters will explain the factors that contribute to poor IAQ, how it can affect student and staff performance, how the Kit helps to address these issues, and a variety of other introductory topics.

Speakers: LaShon Blakely, *Region 4, U.S. Environmental Protection Agency*; Tracee Binion, *Jefferson County Public Schools, AL*; Jim Vaughn, *Jefferson County Public Schools, KY*

10:00 – 10:15 am Welcome Remarks and Symposium Call-to-ActionIndependence A

Speaker: Elizabeth Cotsworth, *Director, Office of Radiation and Indoor Air, U.S. Environmental Protection Agency*

10:15 – 11:00 am General Sessions

SETTING THE COURSE FOR TAKING ACTION

This interactive session will outline the framework for the Symposium and allow attendees to share their personal missions for improving indoor air quality in schools.

Speaker: Tracy Enger, *Indoor Environments Division, U.S. Environmental Protection Agency*

11:00 – 12:15 pm **BUILDING A FIRM FOUNDATION: LATEST RESEARCH ON INDOOR AIR QUALITY IN SCHOOLS**Independence A

How does poor indoor air quality affect academic performance? What are the links between school facilities and occupant satisfaction, indoor air quality, and energy consumption? How can increased ventilation improve academic performance? Learn about the latest findings from several national and international research studies and how they are being used by school districts.

Moderator: John Girman, *Indoor Environments Division, U.S. Environmental Protection Agency*

Speakers: Mark Mendell, *Lawrence Berkeley Laboratories*; Richard Shaughnessy, *University of Tulsa Indoor Air Program*; David Mudarri, *Indoor Environments Division, U.S. Environmental Protection Agency*

12:15 - 1:15 pm **ENVISIONING CHANGE: EMPOWERING SCHOOLS FOR SUCCESS**Independence A

This session will provide attendees with the information, tools, and resources to launch and facilitate a national network for schools committed to ensuring good indoor air quality for children and staff. EPA will share its commitment to help

schools across the nation actively connect; share real-time learning, ideas, and innovations; and advance their indoor air quality management programs.

Speakers: Tracy Enger, *Indoor Environments Division, U.S. Environmental Protection Agency*; Merrick Hoben, *Consensus Building Institute*; Faculty Schools

1:15 – 2:20 pm Regional Networking Lunch Independence A

**2:30 – 4:30 pm SCHOOL DISTRICTS MAKING A DIFFERENCE:
 SHARING PERSPECTIVES ON EFFECTIVE PROGRAMS Independence A**

During this interactive session, school districts that have demonstrated successful and sustainable strategies for overcoming challenges to implement effective indoor air quality management programs will share their success stories, strategies, and learning within the context of key drivers for successful implementation.

Speakers: Tracy Enger, *Indoor Environments Division, U.S. Environmental Protection Agency*; Merrick Hoben, *Consensus Building Institute*; Faculty Schools

4:30 – 5:30 pm MINING SUCCESS: ROUND ROBIN NETWORK Breakout Rooms

Symposium attendees will have an opportunity to begin exploring how to develop or enhance their own action plans while directly interacting with programs who presented their strategies for successfully implementing IAQ management plans in the previous plenary session. This is an opportunity to get real world tips and strategies for overcoming challenges directly from successful programs.

Speakers: Tracy Enger, *Indoor Environments Division, U.S. Environmental Protection Agency*; Merrick Hoben, *Consensus Building Institute*; Faculty Schools

6:00 – 8:00 pm Awards Ceremony and Reception Independence A

Come celebrate this year's *IAQ TFS* award winners! Light hors d'oeuvres will be served.

Speakers: Elizabeth Cotsworth, *Director, Office of Radiation and Indoor Air, U.S. Environmental Protection Agency*; Bill Wehrum, *Acting Assistant Administrator, Office of Air and Radiation, U.S. Environmental Protection Agency*

December **8**
 Friday

7:30 – 8:30 am Breakfast Session

EPA SCHOOL-BASED PROGRAM PANEL DISCUSSION Independence A

EPA school-based programs offer resources, assistance, and guidance to your schools. During this session, four EPA programs will be highlighted: Clean School Bus USA, ENERGY STAR® for K-12 School Districts, SunWise, and the Schools Chemical Cleanout Campaign.

Moderator: Robin Bunch, *Indoor Environments Division, U.S. Environmental Protection Agency*

Speakers: Jennifer Keller, *Clean School Bus USA, U.S. Environmental Protection Agency*; Laura Helmke-Long, *ENERGY STAR® Program, U.S. Environmental Protection Agency*; Linda Rutsch, *SunWise Program, U.S. Environmental Protection Agency*; Eileen Naples, *Schools Chemical Cleanout Campaign, U.S. Environmental Protection Agency*

8:30 – 8:45 am General Sessions

BUILDING MOMENTUM: PUTTING KNOWLEDGE INTO ACTION Independence A

As we begin day two, attendees will reflect on how key drivers for program success provide a framework for more in-depth learning on IAQ technical issues.

Speakers: Tracy Enger, *Indoor Environments Division, U.S. Environmental Protection Agency*; Merrick Hoben, *Consensus Building Institute*

**8:45 – 9:45 am THE VIRTUAL WALK-THROUGH: IDENTIFYING
 AND SOLVING COMMON IAQ PROBLEMS Independence A**

This interactive session will provide participants with a foundation for conducting an IAQ walk-through in their school. Using visual examples and case studies, the presenters will highlight how the information gathered from the *IAQ TFS*

checklists forms the basis for conducting a walk-through investigation. Participants will learn about the steps involved in an IAQ walk-through, common problems that emerge, and practical solutions that school districts can use to remedy problems typically encountered during a building walk-through.

Speakers: Rich Prill, *Washington State University*; Dave Blake, *Northwest Clean Air Agency*

9:45 – 10:15 am Break

10:15 – 11:15 am Concurrent Sessions

MANAGING MOLD AND MOISTURE IN SCHOOLS Independence BCDE

Mold problems in schools can lead to health problems for school occupants, significant financial costs, and a loss of credibility within the community. Too often, resources to address mold are spent on unnecessary testing and poor management of mold remediation. Participants will learn the basics of mold, including various types of mold, myths about mold, strategies for effective mitigation, and practical solutions for mold prevention and management. Participants will also learn how to proactively address community concerns during a mold crisis.

Speaker: Terry Brennan, *Camroden Associates, Inc.*

RISK COMMUNICATION Lafayette-Farragut

Communicating effectively with the school community and other interested parties, including the media, is an essential factor in the success of any IAQ program. This session will discuss the fundamentals of risk communications and will apply those principals to both proactive and reactive communications. The speaker will discuss methods of addressing the need for an IAQ management plan in schools, as well as effective techniques for communicating about IAQ problems as they arise. The result of effective risk communications is an active, well-informed school community that feels confident in the school's IAQ management program.

Speaker: Alvin Chun, *Region 9, U.S. Environmental Protection Agency*

HIGH PERFORMANCE SCHOOLS: BUILDING A HEALTHY SCHOOL ENVIRONMENT FOR STUDENTS Independence FGHI

This session will help school districts understand the components of a high performance school, such as energy efficiency, good indoor air quality, day-lighting, site planning, and water conservation. Attendees will learn tips and strategies for facilitating the design of learning environments that are resource efficient, healthy, and comfortable.

Speaker: Michael Hall, *Fanning/Howey Associates, Inc.*

11:20 – 12:20 pm Concurrent Sessions Repeated

MANAGING MOLD AND MOISTURE IN SCHOOLS Independence BCDE

RISK COMMUNICATION Lafayette-Farragut

HIGH PERFORMANCE SCHOOLS: BUILDING A HEALTHY SCHOOL

ENVIRONMENT FOR STUDENTS Independence FGHI

12:30 – 1:30 pm Lunch Session

PERSPECTIVES ON CHILDREN'S ENVIRONMENTAL HEALTH ISSUES Independence A

Speaker: Dr. Barbara Sattler, *University of Maryland School of Nursing*

1:45 – 2:30 pm PORTABLE CLASSROOMS REQUIRE SPECIAL CONSIDERATION Independence A

Portable classrooms have been a feature of many school districts' building stock for years and this trend is likely to continue into the future. This session will highlight IAQ issues in portables and provide information on choosing specifications, commissioning, maintaining, and relocating portable classrooms.

Moderator: Bob Axelrad, *Indoor Environments Division, U.S. Environmental Protection Agency*

Speakers: Peggy Jenkins, *California Air Resources Board and California Department of Health*; Tom Hardiman, *Modular Building Institute*

2:40 – 3:40 pm Breakout Sessions

(See insert for session descriptions)

GREEN CLEANING PRODUCTS AND PRACTICES Conference Theater

FURNISHING HIGH PERFORMANCE SCHOOLS Independence HI

RADON IN SCHOOLS Independence DE

FRESH AIR: OPTIMAL HVAC MANAGEMENT FOR IMPROVED HEALTH Lafayette-Farragut
ASTHMA-FRIENDLY SCHOOLS Independence BC
USING THE HEALTHY SCHOOL ENVIRONMENTS
ASSESSMENT TOOL (HealthySEAT) Independence FG

3:40 – 3:55 pm Break

4:00 – 5:00 pm Breakout Sessions Repeated
 (See insert for session descriptions)

GREEN CLEANING PRODUCTS AND PRACTICES Conference Theater
FURNISHING HIGH PERFORMANCE SCHOOLS Independence HI
RADON IN SCHOOLS Independence DE
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USING THE HEALTHY SCHOOL ENVIRONMENTS
ASSESSMENT TOOL (HealthySEAT) Independence FG

December
Saturday 9

7:30-8:30 am Breakfast Session

MAKING THE WALK-THROUGH WORK FOR YOU Independence A
 This hands-on session will allow attendees to further explore the components needed to conduct a successful walk-through.
Speakers: Rich Prill, *Washington State University*; Dave Blake, *Northwest Clean Air Agency*

8:30 – 8:45 am IDENTIFYING A FRAMEWORK FOR SUCCESS Independence A
 Attendees will reflect on the previous two days of the Symposium and share their insights and ideas for actions they can take to develop and enhance their IAQ management programs.

Speaker: Tracy Enger, *Indoor Environments Division, U.S. Environmental Protection Agency*

8:45 – 9:15 am General Sessions

KIDS MAKING A DIFFERENCE Independence A
 Need help with your IAQ program? Get the kids involved! IAQ problems affect kids, so they can often play a key role in IAQ management. This session will highlight various initiatives and activities for student participation, showcase school programs that involve students, and offer student testimony on the benefits of participating in the *IAQ TFS* Program.

Speakers: Mansel A. Nelson, *Northern Arizona University, AZ*; Steve Zientek, *Shonto Preparatory High School, AZ*; Apphia Grisham, *Shonto Preparatory High School, AZ*; Elyse-Rae Perez, *Fredonia High School, AZ*; Lonnie Miller, *El Diamante High School, CA*; Maggie Boles, *El Diamante High School, CA*

9:15 – 11:15 am CREATING LASTING LEADERSHIP Independence A
 This final session will give Symposium attendees the chance to develop plans and declare their commitment to improving school indoor air quality and achieving bold outcomes in their schools. Participants will be asked to explore and discuss their specific commitments and strategies for overcoming obstacles, implementing effective strategies, and collaborating through a national network to improve school environments for students and staff across the country.

Speakers: Tracy Enger, *Indoor Environments Division, U.S. Environmental Protection Agency*; Merrick Hoben, *Consensus Building Institute*

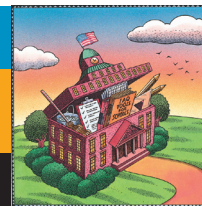
11:15 – 11:30 am Closing Remarks Independence A
Speaker: Tom Kelly, *Director, Indoor Environments Division, U.S. Environmental Protection Agency*

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BREAKOUT SESSION DESCRIPTIONS

GREEN CLEANING PRODUCTS AND PRACTICES

School districts will gain insight on how to transition to a “green cleaning program.” This session will showcase a school district’s experience in reducing exposure to chemical irritants through the use of environmentally preferable cleaning products, training, public awareness activities about health and educational benefits, policy recommendations, and improving the school district’s cleaning program.

Moderator: Steve Ashkin, *The Ashkin Group, LLC*.

Speakers: Allan Wakefield, *East Williston Union Free School District, NY*; Rochelle Davis, *Healthy Schools Campaign*; Claire L. Barnett, *Healthy Schools Network, Inc.*

FURNISHING HIGH PERFORMANCE SCHOOLS

Choosing the appropriate materials is critical for designing and furnishing high performance schools. Making the right choices early will ensure that your high performance school has a healthy indoor environment. This session will provide attendees with effective strategies for choosing building materials, furnishings, and mechanical equipment that contribute to healthy IAQ in schools.

Speakers: Tom Bates, *BLRB Architecture*; Tom Ellis, *Tandus*

RADON IN SCHOOLS

This session will offer an introduction to radon and discuss how radon impacts the indoor environment and the health of people in schools. Presenters will showcase existing radon-in-school projects and discuss effective methods for addressing radon in schools.

Speakers: Bill Bell, *Western Regional Office, Massachusetts Department of Health*; Susie Shimek, *Indoor Environments Division, U.S. Environmental Protection Agency*

FRESH AIR: OPTIMAL HVAC MANAGEMENT FOR IMPROVED HEALTH

This practical discussion of school Heating, Ventilation, and Air Conditioning (HVAC) systems will highlight the importance of proper design, commissioning, maintenance, and operations of school equipment in order to create a healthy environment for school occupants. The presenters will discuss the relationship between a school’s HVAC system and other IAQ principals (children’s health, resources, and maintenance) and how HVAC systems impact the overall IAQ of buildings.

Speakers: Pat Garibay, *Trane*; Ian Hadden, *Trane*

ASTHMA-FRIENDLY SCHOOLS

Asthma affects 6.1 million children in the U.S., and accounts for more than 14 million missed school days each year. Since children spend a majority of their time in schools, it is important to reduce their exposure to environmental asthma triggers commonly found in school buildings. The speakers will discuss effective strategies to help create and maintain an asthma-friendly school.

Moderator: Sarah Merkle, *Division of Adolescent and School Health, U.S. Centers for Disease Control and Prevention*

Speakers: Nancy Langenfeld, *Charlotte-Mecklenburg Schools, NY*; Janet Keysser, *Minnesota Department of Health*

USING THE HEALTHY SCHOOL ENVIRONMENTS ASSESSMENT TOOL (HealthySEAT)

This session provides detailed information on HealthySEAT and how it can assist school districts in evaluating all of their school facilities for key environmental, safety, and health issues. HealthySEAT integrates all of EPA’s programs for schools and also includes key OSHA regulatory requirements and CDC/NIOSH, CDC/DASH, CPSC, and Department of Education recommendations.

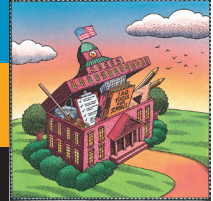
Speaker: Bob Axelrad, *Indoor Environments Division, U.S. Environmental Protection Agency*; Gregg Smith, *Salt Lake City School District, UT*

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FACULTY SCHOOLS



Blue Valley School District, *Overland Park, Kansas*



**Broward County
Public Schools**

The School Board of Broward County, Florida, *Fort Lauderdale, Florida*



Hartford Public Schools, *Hartford, Connecticut*



Katy Independent School District, *Katy, Texas*



West Carrollton School District, *West Carrollton, Ohio*