Real Experience Working with the
***Indoor Air Quality Tools for Schools* Program**
Web Conference Summary
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AGENDA

- Welcome and Introductions – Robin Anderson, U.S. EPA
- Presentations
  - Sandra LeBlanc, Vice Principal, Port Morien, Nova Scotia
  - Darryl Alexander, American Federation of Teachers, Health & Safety Program Director
- General Questions and Answer Period – All presenters
- Closing Remarks – Robin Anderson, U.S. EPA

SUMMARY

Robin Anderson welcomed guests and discussed the goals of these Web conferences. The February Web conference introduced the Web conferencing technology and sought input from participants on the topics they would like to discuss during future calls. During the April Web conference, several guest speakers shared their experiences in resolving the disconnect between school districts/administration and school personnel. In the July Web conference, two guest speakers shared their experiences helping schools to maintain good IAQ during the summer months. For this Web conference, two guest speakers shared their real-world experiences with the *Indoor Air Quality Tools for Schools (IAQ TfS)* Program.

Sandra LeBlanc

Ms. LeBlanc grew up in Sydney, Nova Scotia, as the second of four children. Sydney is home to one of Canada's largest environmental disasters, the Tar Ponds (a stream and lake polluted with sludge from a steel plant that was once Sydney's major industry). After living in several areas of Atlantic Canada while attending university, Ms. LeBlanc returned to Sydney in 1994 and became a teacher. Since then, she has taught primarily high school chemistry. However, Ms. LeBlanc served as guidance counselor last year and has become a teaching vice principal for this school year. The new position is in a four-room schoolhouse in Port Morien.

Ms. LeBlanc has used the *IAQ TfS* Kit since 1995, when she implemented a successful, award-winning program at Glace Bay High School. She has assisted in the training and preparation of a Canadian version of *Tools for Schools*.

The following is a summary of Ms. LeBlanc's presentation:

Ms. LeBlanc explained her background and training. She received mostly on-the-job training for the *IAQ TfS* program. In 1995, Glace Bay High School (GBHS) had difficulties with IAQ. The head of maintenance asked if Ms. LeBlanc would be interested in trying the *IAQ TfS* program. She agreed. She now uses the EPA's *IAQ TfS* Web site frequently, as well as the Health Canada Web site (http://www.hc-sc.gc.ca/english/index.html). She assisted in developing a national training program for the Canadian *IAQ TfS* program. It is similar to the U.S. version, but modified for a Canadian audience.

Ms. LeBlanc's first training and experience was at GBHS. There she had many problems to solve. After several initial successes, she was asked to begin training others about *IAQ TfS* at the provincial level. She now often goes to other schools to help them launch their own *IAQ TfS* programs. Part of her goal is to help schools understand that *IAQ TfS* is more than just another pile of paperwork. Her work on the Canadian *IAQ TfS* program was at a national level.

When she first arrived at GBHS, the five-year-old building had significant IAQ problems. The school was receiving calls from parents and teachers about headaches, drowsiness, and lethargy. Ms.

LeBlanc personally experienced problems with dry eyes. As the complaints continued to increase, former students returned to survey IAQ at the school. This testing provided no conclusive evidence of problems.

At this point, Ms. LeBlanc began her training by attending an *IAQ TfS* seminar. When she returned, she agreed to manage the *IAQ TfS* program at GBHS if she received support from the head of maintenance. The GBHS principal agreed, and this partnership has been successful. This type of support is necessary to a successful program.

At GBHS, Ms. LeBlanc used the *IAQ TfS* Program to pinpoint IAQ problems and identify solutions. She involved students by assigning science projects relating to IAQ. One project addressed heating and cooling problems in the building. Rooms fluctuated between too hot or too cold temperatures. This temperature variation seemed to cause or aggravate problems with drowsiness and lethargy. For this project, students used separate equipment to record classroom temperatures, instead of relying on the building's thermal sensors. Consequently, they discovered that the some of the building's thermal sensors were not accurate. The students' involvement helped to diagnose the problem and to explain the problem to the community at the science fair.

Cleaning products in the school were also a problem. After working with maintenance staff to understand how cleaning products affect IAQ, students completed a community education project about the school's cleaning products. In addition to educating students and the community, this program brought public recognition to the maintenance staff for their hard work.

Ventilation was another issue at GBHS. HVAC workers spoke to students about how the system works. Following this, two students made a model of the system, which they presented to the community at the science fair. In the process, they discovered some filters that had been installed backwards.

The use of personal care products created a problem in the school, in part because it is a sensitive issue. GBHS tried to convince students and staff to reduce their use of scented products through an educational approach. At the beginning of the school year, students and teachers list all possible personal care products that could affect IAQ. Each student then reflects upon their use of the listed products.

Ms. LeBlanc then provided an example of GBHS's successful *IAQ TfS* program. A teacher came to Ms. LeBlanc with frequent headaches. Upon investigation, Ms. LeBlanc discovered that the classroom was used to teach both English and drama. For English classes, the teacher did not experience headaches. However, the drama classes disturbed more irritants, which caused the teacher's headaches. A thorough cleaning of the room solved the problem.

GBHS also instituted a comprehensive no-smoking policy on school property, which had a notable effect on the school's IAQ. In addition, the school developed the following basic tips for the school community:

- Teachers should not turn on ceiling fans when they return from summer vacation without first cleaning off the dust.
- If possible, replace, clean, or remove old drapes at the beginning of the school year.
- If stuffed furniture is used in the classroom (which is not recommended), teachers should use furniture covers that can be cleaned easily.
- Teachers should make an effort to remove old materials from their classrooms periodically.
- When cleaning an area, personal protective equipment is often necessary. In addition, a

change of clothes will prevent the spread of contaminants (e.g., to a home).
- Containers should be used to keep materials organized; however, be sure to air them out to prevent off-gassing.
- Minimize the number of pets in classrooms (or eliminate them altogether) because many students are sensitive to pet dander.
- The "Smoke Free Around Me" program[1] is another helpful resource in a sound IAQ program.

Ms. LeBlanc then presented some photographs of her current school. She is currently working on staff development to help educate other teachers and administrators. To change other people's perspectives, use diplomacy. First and foremost, recognize each person's hard work while introducing new ideas about IAQ. Educate gently, without criticism. For past projects, Ms. LeBlanc has found that working first with students may lead to a successful *IAQ TfS* program.

Daryl Alexander

Ms. Alexander works for the American Federation of Teachers (AFT) in Health and Safety. She serves as project officer for the AFT cooperative agreement with the U.S. EPA. Under this cooperative agreement, Ms. Alexander oversees the following projects:

- Recruiting the cooperation of several urban local districts and their AFT affiliates on the development of model comprehensive IAQ projects. To accomplish this, joint district-wide committees are formed. In addition, AFT trains school staff and leaders on *IAQ TfS* and other consistent IAQ management practices. Through these experiences, AFT will model steps for implementing comprehensive good IAQ management plans in other urban school districts.
- Conducting local *IAQ TFS* symposia in cooperation with the U.S. EPA and local IAQ organizations/experts in several school districts each year. These symposia are used to educate school board members, administrators, school employees, and the community on the value and importance of implementing good IAQ management programs.
- Awarding scholarships to the annual U.S. EPA *IAQ TFS* Symposium, which exposes additional stakeholders to the value and utility of IAQ management at the school level.

A summary of Ms. Alexander's presentation follows:

AFT represents teachers as well as teachers' aides, food service workers, custodians, office workers, facilities maintenance personnel, and more. Ms. Alexander runs the Occupational Health and Safety program for all members, in addition to the joint cooperative with EPA on IAQ and *IAQ TfS*.

Because schools and their operational dynamics are complex, many activities with IAQ implications are constantly taking place. This presents a challenge to recruit all necessary players into an IAQ program. This challenge is enhanced in urban schools, which have been in a chronic state of disrepair for many years. Because of budgetary constraints, deferred maintenance tends to be the standard operating procedure in many urban school districts. To save money on energy and other necessary expenditures, schools tend to take drastic measures that are harmful to IAQ (e.g., closing and locking vents). The recent recession, accompanied by state budget deficits and declining tax bases, has heightened these problems.

[1] The "Smoke Free Around Me" campaign (www.smokefreearoundme.ca) is designed to raise awareness and educate people about the dangers of second hand smoke through newspaper advertisements, radio and television commercials, brochures and the Web site.

There are other barriers as well. Many schools lack the resources and internal expertise to manage projects with IAQ in mind. Districts are also under considerable pressure from the No Child Left Behind Act. They are focused on test scores and new standards for teaching staff, which take resources and support away from IAQ projects.

In addition, parent and community involvement is generally low in urban school districts. Many of these districts do not have a PTO or PTA. Individual parents may not have the time, desire or drive to be active in their children's schools.

Urban school district also tend to have problems associated with high superintendent turnover rates, which can create miscommunication and strain. This often results in a demoralized staff. However, urban school districts also suffer from high turnover rates for young teachers. In fact, 50 percent of teachers who come to work in urban school districts leave within five years

AFT wants to use *IAQ TfS* for unique and experimental projects in urban districts. AFT looks at organizational processes and integrates *IAQ TfS* training into the management of an urban school district. Since each school is unique, AFT spends time learning about each school district and its culture. At each school, AFT forms a joint management committee that helps to identify activities that will work in a particular school and to develop recommendations for incorporating *IAQ TfS*. Because of natural differences from school to school, the same *IAQ TfS* program cannot be implemented everywhere with equal success. It must be adapted and evaluated for each school.

AFT is currently involved in several projects. In Birmingham, Alabama, AFT is working with the Jefferson County Board of Education. They had a crisis in a middle school where they were replacing the roof while school was in session. This became a disaster when students and staff experienced new or exacerbated asthma symptoms and reactive airway problems. The school called the health department, who referred them to the EPA, who referred them back to the health department. Since no answers were forthcoming, the AFT president called the governor, who shut down the school. The school and AFT then conducted surveys and worked with the roofing contractor to exercise safer practices. One benefit of this incident was a newfound dedication to IAQ. The district and local union agreed to form an IAQ committee and develop procedures to help avoid future problems. That committee has since trained teams in every school that consist of the principal, a teacher, the custodian, and a food service worker. These teams use the *IAQ TfS* checklists to conduct assessments and to identify and prioritize IAQ issues. The committee is also receiving training on best management practices and making recommendations to the superintendent and the board. They also began training custodial staff on mold mitigation and on green cleaning using the Green Seal GS37 standard.

New Orleans has also faced IAQ challenges. There, a local AFT representative approached the superintendent and the school board to form an IAQ committee. Though the process is in its infancy, it is working well. AFT is providing training for district staff to educate them on IAQ issues, to dispel misinformation, to examine policies, to make recommendations, and to complete pilot projects.

AFT is also exploring other new and different projects. They are working with several different localities to identify ways to improve IAQ in schools. This project will take two to three years to complete, and the process will identify additional ideas that can be shared with others.

See the attached PowerPoint file for additional detail about the information presented by EPA and the guest speakers.

Question and Answer Session

During the presentations, seminar participants were able to ask questions of the presenters online. Following the presentations, seminar participants were able to ask questions by telephone. Some of the questions were addressed by the guest speakers; additional questions are addressed in this summary.

Theresa Spurling-Wood: What is the size of the maintenance department and how many square feet of buildings are maintained?

Ms. LeBlanc is attempting to obtain this information. For more information on this subject, feel free to contact Ms. LeBlanc directly at sleblanc@staff.ednet.ns.ca.

Sandra, are any kids allergic to playdough?

No, I have not seen that. That doesn't mean it's not possible.

Are there HVAC technicians on the committees AFT establishes?

Darryl: Yes, we include custodial and facilities maintenance staff. They receive training on small- to medium-scale mold remediation projects.

In California we see urban problems like those you described. What happens is that in order to protect teacher positions, they have slashed the maintenance and custodial budgets. How can we communicate to staff that teachers who already have too much on their plates should participate in indoor air quality projects?

Darryl: AFT wants to get districts to do some kind of ongoing surveillance for staff and students to detect health trends. That's one way to involve teachers. We're also asking districts to identify a process to address staff indoor air quality health complaints. It behooves any committee to collect these data, and you can make the case not just to the board but also to the community that children will not perform optimally if no attention is paid to their physical environment.

Susie Rico: How can we get more information on federal and state mandates on health and safety codes and improving indoor air quality?

Darryl: There are no federal mandates for indoor environmental quality in schools. This is a big concern to me. I think there need to be standards on indoor environmental quality in schools. AFT members in some states have OSHA protections, which are minimal because there is no OSHA standard on indoor air quality. Children have no guarantee to a safe and healthful school environment. Many states, however, require inspections. You can check the Environmental Law Institute's[2] Web site for more information (www.eli.org).

Additional questions about the presentations may be directed to Sandra LeBlanc at sleblanc@staff.ednet.ns.ca or Darryl Alexander at dalexander@aft.org. Please use these e-mail addresses only for questions related to this Web conference.

CLOSING REMARKS

Robin Anderson thanked Sandra LeBlanc and Darryl Alexander for their enlightening and interesting presentations. The next *IAQ TfS* Web conference will be held in January 2005 and will focus on followup to EPA's 5th Annual *IAQ TfS* National Symposium.[3]

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[2] ELI is an independent, non-profit center conducting policy studies on the environment and sustainability and reaching out with educational programs, publications, and technical assistance. They operate in the U.S. and abroad. The Web site features a database of state indoor air quality laws.

[3] EPA's 5th Annual *IAQ TfS* National Symposium will be held at the Grand Hyatt Hotel in Washington, DC, on December 2 through 4, 2004. For additional information or to register, visit **www.iaqsymposium.com.**