# Indoor Air Quality in Northwest Schools

## Fall 2008

WASHINGTON STATE UNIVERSITY

## Idaho School Walk-throughs

By Megan Keating



Three professionals check-out a school IAQ visit in Idaho. Left: Traci Lambson, Asthma Prevention Coordinator, Southeastern Health District 6; center: Megan Keating, Health Education Specialist Senior, Indoor Environment Program, Idaho Department of Health and Welfare, and right: Eric Jackson, Assistant Maintenance Supervisor, Snake River School District 52.

As a new health educator for the Indoor Environment Program at the Idaho Department of Health and Welfare, I was not sure what to expect on my first day of school walk-throughs. It was a sunny spring day in the countryside outside Boise as we headed for a visit to a local school. It was my first day of field work with my colleague Jim Faust and Rich Prill from the Washington State University Energy Program, who was providing his expertise. I thought "this is just like the first day of school, and I'm feeling a little nervous not knowing quite what to expect".

The day started by meeting with school officials and maintenance staff who were eager and willing to learn what they could do to improve the air quality in their schools. As we went from classroom to classroom, I became more comfortable checking for ventilation rates, asthma and allergy triggers, and water damage. At the end of the day our walkthrough team sat down and compiled a list of practical recommendations on how to improve the indoor air quality of the school. We then went over the list with the school officials and maintenance staff. My knowledge of school indoor air quality had drastically improved by the

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Student involvement is key to a school's success as a "green school."

> Dave Blake Northwest Clean Air Agency



An electronic newsletter for school Indoor Air Quality exclusively for Northwest schools



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### **Environmental Health Lesson Plans**

By Cameron Stephenson

The Indoor Environment Program has worked with the Environmental Health Education and Assessment Program (EHEAP) to promote Environmental Health Lesson Plans for teachers. The Lesson Plans were developed to provide health and science teachers a fun and interactive resource to introduce Environmental Health into the classroom. Each lesson plan is grade appropriate and tied to state health and science



exiting standards. EHEAP has worked this past year with the Department of Education to introduce the lesson plans at teacher workshops around the state including the Coeur d'Alene, Lewiston, Boise and Pocatello areas. This is an ongoing effort as other conferences, workshops and venues are attended by EHEAP staff where introduction of the lesson plans is appropriate. If you are interested in the lesson plans or would like a demonstration in your classroom, please contact Cameron Stephenson at 208-334-5508 or stephenc@dhw.idaho.gov.

Cameron Stephenson is the Health Education Specialist Senior for the Environmental Health Education and Assessment Program at the Idaho Department of Health and welfare.



A guarterly electronic newsletter exclusively for Northwest schools.

Please circulate this subscription opportunity throughout the Northwest to those who may be interested.

There are two ways to subscribe:

1) To view IAQ News, click here: www.energy.wsu.edu/projects/building/iaq\_nl.cfm The newsletter contains a link for subscription information.

2) Or, send a blank email message to: subscribe-iaq@listserv.energy.wsu.edu

You will receive a confirmation message. When you reply to that message you will be subscribed and will receive all future postings. You can easily unsubscribe at any time.

This broadcast email list not only provides automatic delivery of the quarterly IAQ News, but includes announcements about news of interest, training events, grant opportunities, and other information useful to school districts, agencies, and stakeholders involved in school IAQ and operations and maintenance.

IAQ News is an opportunity for all interested parties to communicate, and add to the collective wisdom.

Note: Indoor Air Quality in Northwest Schools was renamed IAQ News in early 2008.

# Walk-through

Continued from page 1

end of the first day of the school walk-throughs, and I was ready for more!

Prior to my first school walkthrough, I was not aware of all of the possible asthma and allergy triggers present in the classroom, and as I found out many of the students and teachers were not aware either. During our walk-through, we took time in the classroom to educate curious students and teachers about the importance of having a good indoor air environment and about the need to limit or remove plants, pets, upholstered furniture, and dust from the classroom to reduce exposures to people who have asthma and/or allergies. I was surprised to learn that there's a good chance that 2 to 3 students in an average classroom have asthma.

My first walk-through was a great learning experience and prepared me for many more I conducted a few weeks later in southeast Idaho. Although I have learned a lot about indoor air quality by being a part of school walk-through teams, the thing that has impressed me most was the number of schools who are willing to participate in the program. The Tools for Schools Program is voluntary and yet so many school officials have requested our services to make recommendations on how they can improve their schools. In the winter and spring of 2008,

41 school walk-throughs were conducted throughout Idaho. Not only were these school officials proactive about improving the indoor air quality in their schools, but they also showed their care and concern for the students and staff who need to learn and work in these buildings. I am looking forward to seeing how many more school officials are eager to improve the air quality in their school districts this up-coming year.

If you are interested in learning more about the Tools for Schools Program or would like to schedule a school walk-through in Idaho please contact Jim Faust at (208) 334-5717 or faustj@dhw. idaho.gov

Megan Keating is the Health Education Specialist Senior for the Indoor Environment Program at the Idaho Department of Health and Welfare.



#### IAQ News - Indoor Air Quality in Northwest Schools - Fall 2008

## Washington State IAQ Update

By Nancy Bernard, MPH, Program Manager Indoor Air Quality/School Environmental Health and Safety Office of Environmental Health & Safety, Washington State Department of Health

The Washington State Department of Health recently completed nine Fall 2008 School Environmental Health and Safety Workshops with about 250 attendees. Workshops are held in each Educational Service District and are for local Environmental Health Specialists and school staff (including risk managers, maintenance, operations and facility personnel, school nurses, and administrators). Presentations and resources from the workshops are available on line at www.doh.wa.gov/ehp/ts/School/wkshops.htm

Topics covered by the workshops included:

- Status of the State Board of Health (SBOH) Revision to the "Primary and Secondary School Environmental Health & Safety" Rule. At their October 8, 2008 meeting, the SBOH adopted amendments based on public comments on the draft rule released this summer, but suspended voting on the amended rule until sometime prior to June 30, 2009. They are waiting to see what actions the legislature will take regarding funding concerns for implementation of the revised rule. For more information, see www.sboh.wa.gov/Rules/SchoolEH/index.htm
- 2. Importance of Reducing Asthma Triggers in Schools. Two excellent resources available for schools are:
  - Creating Asthma-Friendly Schools, a website and tool kit from the Centers for Disease Control and Prevention. (www.cdc.gov/Features/SchoolAsthma/) The toolkit includes science-based suggestions and an on-line video on the importance of asthma-friendly schools.
  - IAQ Tools for Schools has a "Managing Asthma in Schools" section with specific



information on reducing and controlling asthma triggers in schools. From the Environmental Protection Agency. www.epa.gov/iaq/schools/asthma.html

- 3. DOH IAQ Monitoring Stations. DOH expects that the stations will be available early next year for loaning to schools. A draft questionnaire, survey questions, and loan agreement were discussed with workshop participants. Paul Marchant is the contact for the program. Paul.Marchant@doh.wa.gov
- 4. New Resources for School IAQ (some coming next year):
  - a. Indoor Air Quality Guide: Best Practices for Design, Construction, and Commissioning. Planned for release next year by ASHRAE/EPA.
  - b. *Recognition, Evaluation, and Control of Indoor Mold*, American Industrial Hygiene Association, Edited by Prezant, Weekes, and Miller.
  - c. *Indoor Mold*. From the U.S. Government Accountability Office, September 2008. (*www.gao.gov/new.items/d08980.pdf*) The report recommends that EPA use the Federal Interagency Committee on Indoor Air Quality to coordinate research activities and information sharing on mold and other indoor air issues.
  - d. *The Quick & Easy Guide to Green Cleaning in Schools*. From the Healthy Schools Campaign. The second edition includes new sections on sustainability,

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#### IAQ Update Continued from page 4.

green cleaning for food service, integrated pest management, new technologies and more. www.healthyschoolscampaign. org/campaign/green\_clean\_schools/

- e. *Cleaning for Healthy Schools Toolkit* is a training tool you can use to build awareness, knowledge, and commitment to adopting best practices for green cleaning in schools and child care centers. *www.cleaningforhealthyschools.org/*
- 5. Integrated Pest Management By Carrie Foss, Urban IPM Coordinator for Washington State University Extension, and Eden Advanced Pest Technologies. Schools can obtain Integrated Pest Management (IPM) Star Certification in a partnership between Washington State University and the IPM Institute of North America. Star certification recognizes and rewards IPM practitioners who meet a high standard for IPM in schools, childcare centers, and school-age programs. Vancouver, South Kitsap (Port Orchard), and Bellevue school districts currently have Star certification. Pasco and North Thurston (Lacey) school districts are working toward certification. For more information, see the Urban Pesticide Education Strategy Team (UPEST) website: www.ecy. wa.gov/programs/swfa/upest/index.html
- 6. Hidden Hazards in the Arts By Dave Waddell, King County Local Hazardous Waste Management Program. During inspections of school art programs and commercial art studios, it has become clear that artists are routinely exposing themselves, their students, and the environment to highly toxic chemicals. Dave presented on overview of the hazards identified and potential mitigations in school art activities, including jewelry making, glass staining/blowing/etching, wet photography, and pottery/ceramics.
- 7. School Chemicals Database By Dave Waddell. There are very few ways to get quick information on hazards of chemical compounds. In response to this need, the King County Local Hazardous Waste Management Program developed the Database of School Chemicals, which is available on their "Rehab the Lab" website. The database includes easy-to-understand information on acute and chronic hazards for 976 chemicals found in schools. The database includes National Fire Protection Association codes, hazardous waste disposal codes, compatible storage codes, and chemical abstract system numbers for each compound. The information was developed in coordination with the Washington Science Teachers Association and over 20 secondary school science teachers. Maintenance and purchasing staff can use the list to understand potential hazards of active ingredients in products. *http://lhwmp.org/HWApp/* projects/schools/ChemList.aspx

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## It's Not Rocket Science

By Jim Faust, Indoor Environment Program Manager Idaho Department of Health and Welfare

My colleague Megan Keating and I, along with Rich Prill, teamed up for 42 *IAQ Tools for Schools* walkthrough assessments in Idaho last winter and spring. As it turned out, the Sandpoint visits coincided with the Idaho National Guard removing snow from the school roofs due to the unusually heavy snow fall last year. Rich and I realized something was up when we arrived at the first school and saw the National Guard



troops on the roof cutting the snow into huge blocks with CHAIN SAWS. Then several National Guard members would push the huge blocks of snow off the roof (several times missing parked cars by inches) where front-end loaders would load the snow into dump trucks. Another

Jim Faust explaining CO<sub>2</sub> measurements to a teacher during an Idaho School IAQ walk-through.

reminder of the challenges facing school facility staff season by season, year in and year out. It should also be noted that in all 42 schools it appeared that the maintenance budgets were minimal at best.

I was summarizing our IAQ walk-through findings from these 40+ schools recently and it hit me that many of the IAQ issues we observed are very simple to fix & and often cost very little – we just needed to help with awareness and encourage the schools to make it a priority. I was also reminded of the fact that there are likely two or three students with asthma in every classroom, not to mention teachers and staff with sensitivities as well. I put together a basic list of our findings:

- Heated fragrance candles & scented oils
- High odor dry-erase markers
- CO<sub>2</sub> sensors not calibrated
- Lots of dust in classrooms
- Water-stained ceiling tiles
- Damaged 9 inch floor tiles (likely containing asbestos)
- Poor carpet care / old carpets
- Low lighting levels in classrooms
- Chemical stained carpets
- Ventilation systems "OFF" when students are in the class room (controls set to "AUTO")
- Air systems are turned off
- No outside air with HVAC systems "ON"
- · Custodial rooms with no exhaust
- Classrooms very cluttered
- Spray air deodorizers
- Air coming out of storage areas, science rooms, tunnels
- Chemicals stored in classrooms
- Vacuum cleaners not working properly
- Restroom exhausts not working
- Art room a custodial nightmare
- Rodents, snakes, rabbits, gerbils making messes (asthma and allergy triggers)
- Unvented laminators & copiers
- Exterior doors need "track off mats"
- Carpet in hallways
- Leaking water fountains
- Cotton mops need to upgrade to micro-fibre
- Restroom fans controlled by light switchshould use delayed timers
- Space heaters (suggest problems with hvac systems)
- Mislabeled chemicals
- Last, but not least... a wire door on the chemical room!

## Washington Green Schools

By David Blake, Northwest Clean Air Agency

Washington Green Schools is a program schools can use to reduce their environmental and carbon footprint – and achieve "Washington Green School certification." The online resources and tools lead participants through progressively more challenging actions toward correspondingly higher levels of certification (Tiers 1-4).

An impressive number of partnering stakeholders, both public and

private, have recognized the timeliness and value of this exciting new program for Washington State.

#### **Engage the Students!**

Student involvement is key to a school's success as a "green school." Students take action and assess the current status of the campus in the following categories: energy efficiency, recycling and waste reduction, toxics reduction and indoor air quality, transportation and outdoor air quality, and water quality and conservation.



Because schools must com-

plete a number of tasks in each category, the program provides wonderful opportunities for senior projects. Potential projects might include an inventory of hazardous chemicals, evaluating recycling efforts, creating programs to fill gaps, and anti-idling efforts.

One challenge remaining is how schools will pass their commitments from one graduating class to the next – but never underestimate the power of our youth to find a way.

#### Program Expands in 2009

Currently a successful pilot program in sixteen schools (see locations on map), Washington Green Schools will be available to all schools in 2009. Check the website in 2009 to see how your school can participate. *www.wagreenschools.org* 

## Vacuum Cleaners and Suspended Particles in Schools and Homes

#### By Dave Blake, Northwest Clean Air Agency

Consumer Reports puts out a well-researched article every couple of years rating HEPA and other vacuum cleaners. The last article I have is from October 2007, and once again I found you don't have to spend a fortune to get a vacuum cleaner that actually traps allergens and asthma triggers.

I'm in the habit now of taking my laser particle counter with me on most inspections. I use it for a very basic comparison of indoor air to outdoor air (as a rough assessment of filtration/ventilation efficiency indoors) and to get a sense of the amount of "particle generation" in the building. We all know carpets are a reservoir for particles, and these particles don't stay put—once airborne, the smallest particles take days to settle.

So, I always like to check the particle count from the exhaust of the vacuum cleaners (and out of any room HEPA air cleaners I encounter). What I am finding is that even popular HEPA backpack vacuums spew out fine particles if they are not properly maintained.

Maintenance means a regular, thorough cleaning of the housing and all the little "spongy " filter components, as well as frequent changing

of the bag itself (half full is "full"). If you really think about it, you are probably better off not vacuuming than to use a vacuum that sprays a haze of fine particles that take hours, if not days, to settle.



# **Creating a Customized IAQ Program**

The good news for school IAQ is the wealth of excellent information and resources available. While it's great to have these resources, it can be overwhelming for the typical school IAQ coordinator or team to glean the essentials from all of this information in order to create a practical and effective IAQ program.

The following "menu" of suggested policies and guidance was compiled to make it easier for schools to get an IAQ program defined and started. The idea isn't to create a perfect program, but to get a basic program in place that can evolve over time as goals are met and new challenges emerge.

Even those schools with IAQ programs in place are encouraged to review this list occasionally to consider refining their program, and to provide suggestions for policy and guidance elements to be added to the list.

Send your suggestions to Rich Prill (*prillr@energy.wsu. edu*) and we will update this resource.

Select the items below that best fit the needs of YOUR school's students and staff, adding "Self Selected Elements" as appropriate.

These suggested elements of indoor air quality (IAQ) programs are from **IAQ Tools for Schools: Indoor Air Quality Implementation – 3 Easy Steps**, Environmental Protection Agency (EPA) Region 10. www.energy.wsu.edu/documents/building/iaq/schools/3step\_iaq\_program.pdf

## **1. Policy and Guidance**

- 1. Gain the support of your school's administrators to adopt and participate in the EPA Tools for Schools Program.
- 2. Establish written IAQ policies for your school.
- 3. Post your school's IAQ policy in conspicuous locations around the school.
- 4. Inform parents and students that your school has an IAQ policy.
- 5. Develop and adopt specific IAQ guidance for administration and staff (no furniture "from home", no live-in animals in classrooms, use only approved chemicals in the school, discourage use of fragrances, etc.).
- 6. Adopt and enforce practical "good management practices" for operation and maintenance of the school's various "systems".
- 7. Adopt and enforce practical "standards of care" guidance for custodial care of the facility.
- Adopt an Integrated Pest Management (IPM) policy to reduce the quantity and toxicity of pesticides used on schoolgrounds.
- 9. Develop guidance on the purchasing of new materials and equipment consistent with US Green Bldg. Council policies, the goal being to reduce or eliminate air pollutant sources within the school the school (photocopiers, laminators, etc. must have dedicated exhaust systems, adhesives and paints should be low emission, etc.

10. Adopt detailed guidance for renovation and remodeling.

Self Selected Elements:

- 11.\_\_\_\_\_
- 12.\_\_\_\_\_
- 13. \_\_\_\_\_ 14. \_\_\_\_\_
- 15.
- .\_\_\_\_

## 2. Indoor Air Pollutant Sources

- 1. Review IAQ pollutant sources information in the Tools For Schools Action Kit.
- 2. Conduct a thorough survey of the facility (inside and outside) to identify indoor air pollutant sources.
- 3. Eliminate as many indoor sources of pollutants as possible and incorporate into guidance to permanently keep these out of the facility.
- 4. Substitute lower-toxicity versions of indoor air emitting products, materials, and equipment.
- 5. Install carbon monoxide (CO) alarms in conspicuous locations near combustion sources for occupants to monitor.
- 6. Reduce asthma triggers (dust, pollen, insects/mites, rodents, custodial chemicals, fragrances, classroom and art supplies, etc.).

Self Selected Elements:

- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- 9. \_\_\_\_\_\_
- 10. \_

## 3. Ventilation

- Establish a good working relationship between the IAQ coordinator and individuals that operate and maintain the ventilation system(s) for the facility.
- 2. Review the design intent and current operation of the ventilation system(s), especially in areas where remodeling has occurred, walls added to divide spaces, or intended use has changed. Remodeling can adversely affect the efficiency of the original ventilation system design.
- 3. Organize a "tour" of the ventilation system(s) led by the systems operator and note actual operation and condition of equipment. Ensure outside air is not contaminated by outdoor sources, outside air quantities are adequate, filters are tight-fitting and of good quality, ducts are dry and relatively clean, mechanical rooms are not used to store chemicals or other potential air pollutant sources, and controls & time clocks are set appropriately. Invite staff along on "tour" to give them a better understanding of how air handling systems function.
- Coordinate with ventilation systems operator to develop and use maintenance checklists and maintenance calendars & logs to ensure routine checks are made and preventive maintenance (PM) servicing is completed – (see EPA's Building Air Quality Manual for sample forms).
- 5. Carefully look for and correct "unplanned air flows" that can move air pollutants to occupied zones (use tracer smoke, etc.) Examples: from science lab to adjacent classroom, or from basement to main floor.
- 6. Ensure that exhaust fans actually move air (not just make noise or are not ducted outside), ensure that exhaust zones (including laboratory hoods) are actually under "negative pressure", ensure that system on/off timers are set properly.

- Purchase or borrow a carbon dioxide (CO<sub>2</sub>) monitor to make routine measurements throughout the facility during peak occupancies to ensure that rooms are sufficiently ventilated.
- 8. Make sure ventilation air is supplied to all classrooms and "portable classrooms" at all times when these spaces are occupied (many heating and A/C units only deliver air when the thermostat is calling for heat or air conditioning no air is delivered when the space is comfortable).
- 9. Train all ventilation systems operators on the subjects of ventilation and IAQ, equipment and measurement of air flows, assessment of unplanned air flows, and pressure control.
- 10. Respond to comfort or indoor air quality concerns promptly and appropriately.

Self Selected Elements:

- 11.\_\_\_\_\_\_
  12.\_\_\_\_\_
- 13.\_\_\_\_\_
- 14.\_\_\_\_\_ 15.

## 4. Operation & Maintenance

- The IAQ Coordinator will establish a good working relationship with the operation & maintenance (O&M) staff in order to fully integrate good IAQ practices into daily O&M practices.
- 2. O&M staff will review the Tools for Schools Action Kit materials and adopt a proactive approach to their work.
- 3. O&M staff will review and complete the Building Maintenance Checklists on a routine basis.
- 4. O&M staff will review the EPA's Building Air Quality Manual and upgrade procedures where applicable.
- 5. O&M staff will incorporate forms, checklists, and logs from the EPA's Building Air Quality Manual where applicable.
- 6. O&M staff will schedule and perform routine "walk-through" assessments of the facility to assess comfort, IAQ, and safety hazards.

## Creating a Customized IAQ Program – Page 3

- 7. Personal safety training and equipment will be provided for O&M staff to protect them during assessments, maintenance, and cleanup activities.
- 8. O&M staff will be trained in proper handling, clean-up, and disposal of chemicals, moldy materials, and know when to request professional help.
- 9. Contractors: formally advise mechanical and other contractors providing services to your facility that your school is participating in the EPA Tools for Schools Program and will be requiring "good management practices" in terms of the heating/ventilation systems, selection and use of low-emission products, control of fumes & dust during work, emphasis on energy saving equipment, protection of ductwork during construction (drywall dust) and thorough clean-up.
- 10. An IAQ Response Plan will be developed to ensure that IAQ-related health concerns and time-sensitive situations (carbon monoxide, spills, leaks, electrical, etc) are addressed promptly and appropriately.

Self Selected Elements:

- 11.

   12.

   13.

   14.
- 15.\_\_\_\_\_

### 5. Classroom Management

- 1. Maintain a "cleanable" classroom. Avoid excess clutter and accumulation of dustcollecting objects that could be boxed or stored in cabinets (especially stuffed toys).
- 2. Report evidence of water leaks, spills, wet carpet, etc. to maintenance personnel promptly to avoid property damage or biological growth.
- Typically, maintenance budgets will not support regular dusting of classrooms, if at all. Try to wet wipe excessive dust from classroom surfaces when you see it. Encourage students and/or parents to assist in this effort to reduce allergy "triggers" that could impact student and staff health.

- 4. Allow only vinyl covered stuffed chairs and sofas in classrooms Don't allow used furniture to be brought into the classroom, particularly furniture that contains fabric or is fleecy. They often harbor high concentrations of allergens
- 5. Don't adjust HVAC time clocks or other HVAC equipment controls without permission and instruction from qualified maintenance staff.
- 6. Report concerns about classroom climate discomfort (noisy fans, inadequate lighting or glare, cold drafts, excess heat, stuffiness, odors or high relative humidity and condensation) to maintenance staff for adjustment.
- 7. Learn where supply and return vents are located in the classroom, and ensure that air flow is not blocked by objects. Explain their purpose to students.
- 8. Integrate instruction about improving IAQ in the classroom with tips about improving IAQ at home.
- 9. Use only low-emission markers and art supplies.
- Assure that no toxic chemicals (e.g., Drano<sup>®</sup>, Raid<sup>®</sup>) are stored in cabinets under sinks. Keep them in a marked and secured storage room.

Self Selected Elements:

- 11.

   12.

   13.

   14.
- 15. \_\_\_\_\_

## 6. Curriculum and Student Involvement

- 1. Develop and use lesson plans designed to inform students about the importance of maintaining good IAQ at school and at home.
- 2. Encourage students to survey for indoor air pollution sources in school and at home as class projects.
- 3. Obtain a copy of the *"Teacher's Guide to Indoor Air Quality"* and share with interested faculty and students.
- 4. Include IAQ subjects into science class projects (chemistry, environmental science, earth science, etc.).
- 5. Work with school newspaper staff to include articles on IAQ.

- 6. Ensure students have access to carbon dioxide and other IAQ monitoring results and make sure their significance is discussed.
- 7. Ensure students are aware of the location of carbon monoxide alarms/sensors and under-stand what the readings mean.

Self Selected Elements:

8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	

## 7. Documentation

- 1. Keep a file of all maintenance logs, checklists, and reports related to IAQ.
- 2. Document proactive measures your school implements related to IAQ.
- 3. Document and file all IAQ-related issues and the corrective actions used to address the issues include costs, venders, contractors, and resources used.
- 4. Track illnesses/absenteeism related to specific rooms and zones in the building.
- 5. Track costs of IAQ problems in terms of staff time (faculty, admin, O&M, custodial, contractors, etc) to help document the importance of preventive measures/maintenance in terms of cost savings.

Self Selected Elements:

- 6. \_\_\_\_\_\_ 7. \_\_\_\_\_ 8. \_\_\_\_\_ 9. \_\_\_\_\_
- 10. \_\_\_\_\_

## 8. Communications and Awareness

- 1. Form an IAQ team. Suggested members are an administrator, teacher, facilities staff, HVAC tech, parent, nurse, ....
- 2. Provide IAQ information at staff in-service workshops.
- 3. Encourage IAQ discussions and study in classrooms.
- 4. Broadcast that your school is participating in the EPA Tools for Schools Program.
- 5. Send bulletin to teachers and students explaining IAQ.
- 6. Let parents know IAQ is a priority for your school.
- 7. Provide IAQ fact sheets, Tools For Schools Action Kit, report forms, and other resource materials in a prominent location.
- 8. Work to get IAQ facts and guidance into the school newspaper or bulletins include "IAQ in the home" to increase awareness of parents/guardians.
- 9. Work with the school nurse to identify and track/document health issues (especially asthma) that may be related to the indoor air.
- 10. Provide teachers with students diagnosed with asthma with guidance on reducing asthma triggers and proper procedures to follow in case of an asthma attack.
- 11. Subscribe to the *IAQ News* newsletter and pass the link along to all staff and parents (*www.energy.wsu.edu/projects/building/iaq\_nl.cfm*).

Self Selected Elements:

- 12. \_\_\_\_\_
- 13. \_\_\_\_\_
- 14. \_\_\_\_\_
- 15. \_\_\_\_\_

### Other IAQ Program Notes