

# IAQ News



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*For deep cleaning with a self-propelled extractor, always operate in the “Turtle” speed range.*

*Pat Nicholson  
Central Kitsap  
School District*

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

## The Future of Carpet Care

*Pat Nicholson  
Central Kitsap School District*

Pat Nicholson has decorated his carpet extractor “Fang” to attract and involve the students on the importance of clean schools. Pat is not only diligent and a role model, but it’s obvious he is also incredibly creative and knows how to make an impact. Thank your custodian today!

### Carpet Cleaning Best Practices:

1. **Vacuuming** – The better you vacuum a carpet, the more deeply you can extract a carpet.
2. **Pre-treat** – For best results pre-treat carpets with a non-phosphate carpet approved cleaner such as Procyon or Extraction Pro. Be sure to spray the entire carpet evenly with a fine mist, 1 quart of solution per 1000 sq. feet (or 1 gallon for about 4 classrooms) is enough.
3. **Why bonnet?** – It’s a proven fact that pre-treating a carpet and using a good carpet extractor eliminates the need to loosen embedded dirt by carpet bonneting. Bonneting takes a lot of time and effort, time and effort that can be used to extract more dirt out of the carpet.
4. **Extraction** – In most cases, extract with clear water only. The newer extractors agitate carpet fibers better and have a higher rate of water extraction than the older machines, leaving the carpet cleaner and dryer. For deep cleaning, extraction must be slow and measured. Also, it’s best to overlap the carpet you have just cleaned by at least 6 inches on each pass.
5. **Spotting** – Summer carpet spotting can be done as you are using the wand to extract corners and other areas of carpet that you cannot reach with an extractor. Good extraction will



*Pat Nicholson's fun and functional creation*

# IAQ News

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## Another Pitch to Be Pro-Active on IAQ

By Dave Blake, Northwest Clean Air Agency

You may have seen the recent *USA Today* article that ranked the nation's schools located within zones of the worst outdoor air quality. One of our local school districts was ranked as having the 7th worst outdoor air quality, due to the location of two oil refineries a few miles away.

You can bet the phone calls started coming in from concerned parents. The Superintendent was able to defend the school district from any claims of negligence or being asleep at the wheel because the entire district had been evaluated, classroom by classroom, back in 2002 by school IAQ experts.

Over the past two years, the entire district has transitioned to "green" cleaning methods. District custodial and maintenance staff have received customized training on IAQ and "green" cleaning. Carefully documented regular air filter changes assure that levels of airborne particles within the schools are typically half what is found outside.

All of this pro-active effort is clearly pretty good ammo to reassure parents that, although the school district cannot control potential pollutants leaving a refinery, the district can and does aggressively do the best it can to protect IAQ for staff and students.

This situation is another prime example of the real value of communications and "marketing" schools need to do on a routine basis. 🚌

# IAQ News

A quarterly 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](http://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](mailto: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.

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## Oregon Environmental Council Says *It's Not Cool to Idle at School*

By Carrie Jones, Community Outreach Coordinator, Oregon Environmental Council

Did you know that for every two minutes you spend idling your car while waiting to pick up your child you use enough gas to drive one mile? Or that your car produces more carbon dioxide, nitrogen oxides, volatile organic compounds, carbon monoxide, and particulates when idling than it does when it is moving? It's true.

According to the Environmental Protection Agency, idling for more than 10 seconds uses more fuel than restarting your engine. When you idle your car while waiting at school, you turn money into pollutants that hang around the school, not doing your children's health any good.

Your school can participate in a program called *It's Not Cool to Idle at School*, sponsored by the Oregon Environmental Council (OEC). The program raises awareness of the negative effects of excessive idling and seeks to enlist schools, students and parents in curbing it. Your school can distribute OEC's free anti-idling toolkits so students can help start a campaign to reduce air pollution in and around their school. The toolkit is meant to be used by students, parents, and teachers

to encourage faculty, staff, and parents to feel a responsibility to shut off their engines around schools.

The toolkit includes fact sheets dispelling some common myths about idling and information about pollution in car exhaust. It includes an observation sheet and calculation sheet for in-class time where students can learn more about some of the different types of pollutants emitted by vehicle exhaust. The kit also includes pledge medallions which can be hung on your rearview mirror as a reminder for people that:

***It's Not Cool to Idle at School!***

Oregon Environmental Council's *It's Not Cool to Idle at School* vehicle anti-idling project is geared for use by 5th – 8th grade students. *It's Not Cool to Idle at School* utilizes different learning processes to introduce students to environmental topics and encourages students to take the lead in reducing pollution in and around their school.

Our *It's Not Cool to Idle at School* toolkit includes all the information, directions, and materials teachers and students need to

complete a fun, rewarding, and educational project. The toolkit guides your students through:

- the facts and statistics of air pollution caused by vehicle idling;
- effective communication methods for reducing air pollution in and around their school;
- observation and calculation techniques; and
- hands-on scientific analysis skills they will use in the future.

More information and toolkit request forms can be found on our website at [www.oeconline.org/our-work/kidshealth/schools](http://www.oeconline.org/our-work/kidshealth/schools).

Please email [volunteer@oeconline.org](mailto:volunteer@oeconline.org) if you'd like to find out more about the project. 📧



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## Indoor Air Quality – Tools for Schools

A recent U.S. Center for Disease Control study found that half the nation's schools, representing 30 million children and staff, now have IAQ management programs in place, 85 percent of which relied on EPA's *Indoor Air Quality Tools for Schools*.

*Time marches on...* but not all NW schools have a functioning IAQ Program.

### Indoor Air Quality (IAQ) Action Kit

EPA introduced the IAQ TFS program back in 1995 as a comprehensive resource to help schools maintain a healthy environment in school buildings by identifying, correcting, and preventing IAQ problems. The program has provided hundreds of schools with a variety of easy-to-use products, materials, and tools at no cost to help them implement an indoor air quality management program.

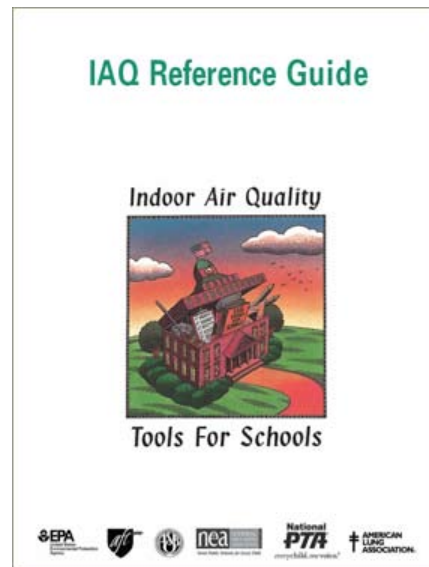
This easy-to-use kit shows schools how to carry out a practical plan of action that will maintain or improve indoor air quality, at little or no cost, using common-sense activities and in-house staff. The kit was developed by EPA, and is co-sponsored by the National Education Association, National PTA, Council for American Private Education, Association for School Business Officials, American Federation of Teachers, and the American Lung Association.

Contact Susan Titus at 206-553-1189 or toll free at 1-800-424-4EPA for information about taking part in a school Indoor Air Quality walk-through or for additional information about the kit.

All components of the kit except the problem solving wheel may be downloaded at <http://www.epa.gov/iaq/schools/actionkit.html>.

The following components are contained in the kit:

- IAQ Coordinator's Guide
- IAQ Coordinator's Forms
  - Activating the IAQ Management Plan
  - IAQ Coordinator's Checklist
  - Checklist Log



- Local IAQ Service Providers List
- Problem Solving Checklist
- IAQ Backgrounder
- IAQ Checklists
  - Teacher's Checklist
  - Administrative Staff Checklist
  - Health Officer's Checklist
  - Ventilation Checklist
  - Building Maintenance Checklist
  - Food Service Checklist
  - Waste Management Checklist
  - Renovation and Repair Checklist
- IAQ Problem Solving Wheel
- IAQ Tools for Schools – Taking Action and Ventilation Basics Videos

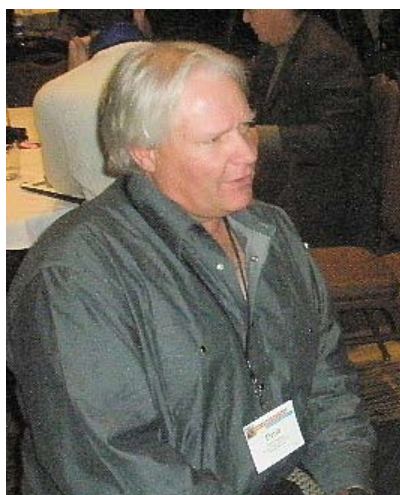
A single copy of the Kit is available at no cost to schools by contacting:

IAQ INFO Clearinghouse  
1-800-438-4318 (use the IAQ Clearinghouse reference number 402-V-98-001)

The *IAQ Tools for Schools – Taking Action and Ventilation Basics Videos* are also available free of charge from the Clearinghouse. 🚌

## Northwest School District Honored by EPA

Eight school districts that are leading the way to prevent and solve indoor air quality problems in schools were honored at the EPA's Indoor Air Quality Tools for Schools National Symposium in Washington, D.C., from Dec. 4-6, 2008. Indoor air quality (IAQ) problems in schools can lead to a range of health problems, including allergy symptoms and asthma attacks. Students and staff exposed to poor IAQ can also suffer diminished performance and concentration.



*Darin Martins of Klamath Falls, Oregon, was one of the Northwest school officials that attended the EPA symposium.*

"Indoor air quality leaders are doing great things in their communities and serving as role models for communities across the nation," said Elizabeth Craig, deputy assistant administrator for EPA's Office of Air and Radiation.

"Together, we will continue improving the indoor air quality in all our nation's schools."

The three-day symposium focused on the latest research and information on environmental health topics such as radon, mold, asthma management, maintaining ventilation systems for good IAQ, integrated pest management, green cleaning products and practices, and best practices of high-performing schools.

This year, one Region 10 school was among the Tools for Schools award winners – **Mike Anderson and Chris Dean accepted the award for Bellingham School District, Bellingham, Washington.**



### Carpet Care Guy

Pat Nicholson, Central Kitsap School District, Washington, presents seminars on his program he calls "The Future of Carpet Care." See his outline of carpet care recommendations on page 1.

Other winners were:

- Connecticut Technical High School System, Middletown, Conn.;
- Newark Public Schools, Newark, N.J.;
- North East Independent School District, San Antonio, Texas;
- Amity Regional School District No. 5, Woodbridge, Conn.;
- Baldwin Union Free School District, Baldwin, N.Y.;
- Diane Rhodes of San Antonio, Texas; and
- Peggy Caruso of Katy, Texas. 🏆

## 9th Annual TfS Symposium

The entire group of approximately 500 participants, representing schools nationwide, was asked to respond to some interesting questions. Here's what a cross-section of these nationally represented school folks are thinking:

### 1. Describe the kind of IAQ action needed in your school district:

- 0% None
- 19% Fine tuning and communication
- 31% A lot of small issues to address
- 29% Major efforts in a few areas
- 21% All out across-the-board campaign

### 2. Which of these IAQ issues would you like to explore further?

- 20% HVAC
- 20% Moisture / Mold
- 7% Integrated Pest Management
- 28% Cleaning and Maintenance
- 16% Materials Selection
- 9% Source Control

### 3. What is your school's command of aggressive indoor air pollutant "source control"?

- 7% Out of control, poor IAQ
- 41% Weak system, problem areas
- 45% Workable system, can be improved
- 7% Able to maintain effective system

### 4. What is your school's response to these questions?

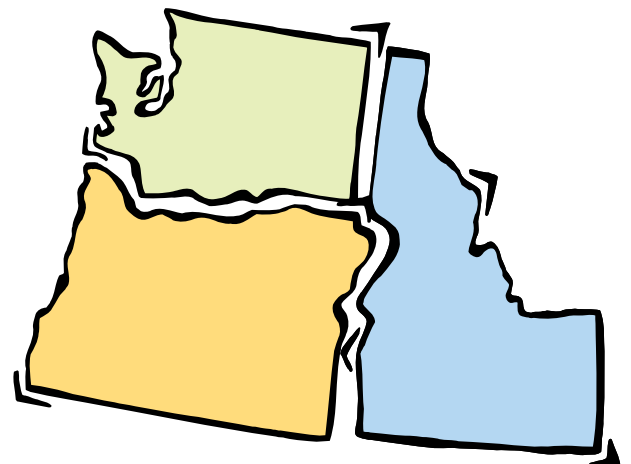
#### Need help with answers?

Please contact the following for assistance:

- Susan Titus, Region 10 EPA  
(206) 553-1189
- Rich Prill, WSU Energy Program  
(509) 477-6701
- Dave Blake, NWCAA  
(360) 428-1617 Ext 212
- Nancy Bernard, Washington State Department of Health  
(360) 236-3072
- Beverly Stewart, American Lung Association of Oregon  
(503) 718-6146
- Jim Faust, Idaho Department of Health and Welfare  
(208) 334-5717 📞

## DVD on Asthma-Friendly Schools

*Asthma Friendly Schools: A Coordinated School Health Approach* is a 17-minute DVD that details the Oregon Department of Education's approach to asthma education and awareness in Oregon schools. Oregon's approach can be used as a model for other states. The DVD is not copyrighted and can be freely copied. To get a free copy, contact [tamara.kuenzi@state.or.us](mailto:tamara.kuenzi@state.or.us). 📺



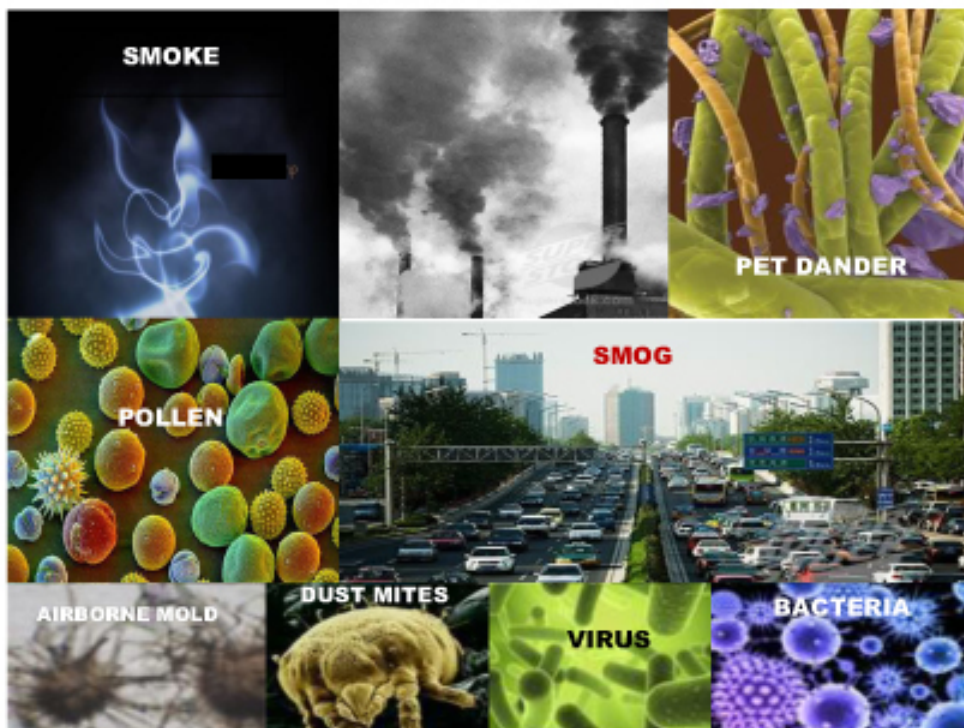
# SAVE THE DATE



**Healthy Buildings, Active Learners:**  
*Improving Indoor Environments for Oregon Schools*

Thursday, May 7, 2009

Village Green Resort  
Cottage Grove, Oregon



For additional information, visit the website: <http://www.mrsnv.com/evt/home.jsp?id=2455>

Presented by:

Oregon Schools Indoor Air Quality Partnership

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- ★ Facility Managers
- ★ Teachers
- ★ Superintendents
- ★ Safety Coordinators
- ★ Parents
- ★ PTA/PTO Members
- ★ Anyone interested in Healthy Buildings/Active Learners

## Carpet Care

*Continued from page 1*

eliminate the need for heavy spotting. Don't waste a lot of time on ink and other stains that won't come out. Though unsightly, ink stains do not harm indoor environmental quality as much as a dirty carpet. You will do more to improve indoor air quality by spending more time extracting carpets and less time working on an ink stain that you will never completely get rid of anyway.

**6. Drying** – Even in the summer, drying carpets can be a real challenge. And even using extractors with a high water recovery rate, carpets will not dry quickly and completely without some help. High volume drying fans with open windows and doors is one method. If you can smell wet carpet the day after you have cleaned it, you have not properly dried the carpet. A good rule is the two hour rule, give freshly-extracted carpets at least two hours (preferably more) of carpet fan time. This means rotating fans to freshly cleaned carpets every two hours. This also means that you should stop extracting carpets two hours before the end of shift. Follow these

rules and you'll have much less of a wet carpet smell in your school the next morning.

**7. Equipment Cleanup and Maintenance** – After you've finished cleaning carpet for the day, you must clean all carpet equipment. Extractors simply do not work well when jets are plugged, when water is left in the solution tank, and when waste tanks, hoses, wands and vacuum shoes are not cleaned. There is nothing more frustrating than trying to start extracting the first thing on a summer morning and having to stop and clean jets or a dirty and badly maintained carpet extractor. If equipment is cleaned properly after it is used, you will never have that problem. One good thing about finishing extracting carpets two hours before the end of shift is that you have plenty of time to clean equipment. Be sure to use a de-foamer in the waste tank.

**8. Other Carpet Tips, From The Future!** –

**A. Drain the Tank!**

- As part of equipment cleanup, always drain the solution tank. It's better to start extracting with a

fresh tank of water than water that has been sitting in the tank stagnating for who knows how long. Better yet, go with a tank-less extractor that pulls fresh water from a tap and drains to a sink.

**B. Carpets like it HOT!**

– Fill your solution tank with hot water, a natural degreaser. You will pull out more oily dirt with hot water and the carpet dries quicker too.

**C. Go Slow, Clean Low!**

– For deep cleaning with a self-propelled extractor, always operate in the "Turtle" speed range.

**D. Carpet cleaning is nice, even better if done twice!**

- If you can avoid the need to bonnet, the time saved can be used to extract heavily soiled classroom carpets twice. You will often find nearly as much dirt extracted on the second pass as you did on the first.

The future of carpet care is all about keeping the dirt level in carpets low. The proven best practice is frequent and thorough vacuuming, and regular, deep carpet extraction.

Contact Pat Nicholson at [patn@cksd.wednet.edu](mailto:patn@cksd.wednet.edu) . 📧