

# AIRlines

Helping small businesses comply with the Air Quality Act

Fall 2006

## Fleet emissions reductions—*are you idling away your profits?*

If your organization hasn't done anything to reduce engine idling, it may be losing a significant amount of revenue and impacting the environment at the same time.

According to the EPA, engine idling consumes more than one billion gallons of regular and diesel fuel each year. That's a lot of money at today's high fuel prices. Idling also shortens engine life and increases engine maintenance costs. The environmental impacts are significant too. Nationwide, idling contributes 200,000 tons of nitrogen oxides (NO<sub>x</sub>) annually. NO<sub>x</sub> is a precursor pollutant to ground-level ozone. This is a troublesome issue in the greater Kansas City area, which is facing the possibility of violating EPA's eight-hour ozone standard.

What can your organization do to reduce unnecessary fleet/or diesel engine idling? The cheapest and simplest method is to

change the behavior of your drivers or operators. Fleets that operate around your business or in your regional area should evaluate what a reasonable idling time is, and then set a company or agency policy. Inform drivers about the need to reduce fuel consumption and emissions. You might consider offering incentives to reduce idling.

Besides reducing fleet idling, businesses can and should identify other ways to reduce fleet emissions. Consider the following suggestions, as well as others listed in the Kansas City *Clean Air Action Plan* located at [www.marc.org/Environment/airQ/pdf/clean\\_air\\_action\\_plan.pdf](http://www.marc.org/Environment/airQ/pdf/clean_air_action_plan.pdf).

- Use the smallest vehicle possible for the task. In other words, don't use a van if you really only need an economy car.
- Consider adding economy cars or hybrids to your fleet as

### Inside

|                                |   |
|--------------------------------|---|
| Guide to abbreviations .....   | 2 |
| MACT watch .....               | 3 |
| Open burning .....             | 4 |
| High-energy small businesses.. | 5 |
| Air Quality 102 Workshops .... | 6 |
| EnviroMike.....                | 7 |
| AIRlines calendar .....        | 8 |

continued on page 2

new purchases are made. Before you buy, take a look at EPA's Green Vehicle guide at <http://www.epa.gov/greenvehicles/>.

- Test your fleet's gas caps. About 30 gallons of gas a year can be lost due to faulty gas caps. Contact SBEAP at 800-578-8898 for information about testing equipment.
- Consider heavy-duty engine retrofits.

- Fuel vehicle when it is cool, not in the heat of the day.
- Don't "top off" your gas tank. Stop at the click. Topping off your tank allows emissions to escape, sometimes spilling gas.
- Maintain your fleet to ensure it is running efficiently.

If your company contracts with a trucking vendor to haul your goods, utilize a firm that has committed to the SmartWay Transport Partnership. A list of these partners can be found at [www.epa.gov/smartway/idling.htm](http://www.epa.gov/smartway/idling.htm).

In partnership with the Kansas Department of Health and Environment, the SBEAP will host a fleet emissions and idle-reduction outreach effort in the Kansas City region this spring. A lunch-and-learn and other activities are being planned. Stay tuned to [www.sbeap.org](http://www.sbeap.org) for more information, and plan to reduce your fleet idling and emissions while improving your bottom line and Kansas air quality. ♻️

### Idle-reduction worksheet

DOE's Argonne National Laboratory has just published a new worksheet that helps truck owners figure their savings and pay-back when using idle-reduction equipment. Find the worksheet at [www.transportation.anl.gov/pdfs/EE/361.pdf](http://www.transportation.anl.gov/pdfs/EE/361.pdf).

Many large trucking companies offer incentives and have reported success in reducing idling times. Trucking companies around the country are looking at idle-reduction technologies such as automatic engine shut-down and start-up, auxiliary power units/generator sets, direct fire heaters, and electrification.

### No idling needed

Modern cars do not need to idle long to warm up. If a vehicle will be standing longer than one minute, shut it off. Idling wastes gas and contributes to air pollution.

## Abbreviations used in Kansas AIRlines

|                 |   |
|-----------------|---|
| BAR             | Bureau of Air and Radiation                             |
| CAA             | Clean Air Act (as amended in 1990)                      |
| EMS             | environmental management system                         |
| EPA             | U.S. Environmental Protection Agency                    |
| HAP             | hazardous air pollutant                                 |
| KDHE            | Kansas Department of Health and Environment             |
| MACT            | maximum achievable control technology                   |
| MSDS            | material safety data sheet                              |
| NESHAP          | National Emission Standard for Hazardous Air Pollutants |
| NO <sub>x</sub> | nitrogen oxides   |
| P2              | pollution prevention                                    |
| POTW            | publicly owned treatment works                          |
| PTE             | potential to emit                                       |
| SBEAP           | Kansas Small Business Environmental Assistance Program  |
| SIC             | standard industrial classification                      |
| VOC             | volatile organic compound                               |

## Editorial Board

|                                 |                                       |
|---------------------------------|---------------------------------------|
| Managing Editor .....           | Nancy Larson, Kansas State University |
| Editor.....                     | Mary Rankin, Kansas State University  |
| Designer/Illustrator.....       | Bob Davis, Kansas State University    |
| Technical Writers/Editors ..... | Steve Travis, Kansas State University |
|                                 | Barb Johnson, Kansas State University |
|                                 | David Carter, Kansas State University |
| Production Supervisor.....      | Rich Gardner, Kansas State University |

This publication was created by Kansas State University's Pollution Prevention Institute through the Small Business Environmental Assistance Program (SBEAP). SBEAP's mission is to help Kansas small businesses comply with environmental regulations and identify pollution prevention opportunities. SBEAP is funded through a contract with the Kansas Department of Health and Environment. SBEAP services are free and confidential. For more information, call 800-578-8898, send an e-mail to [SBEAP@ksu.edu](mailto:SBEAP@ksu.edu), or visit our Web site at <http://www.sbeap.org>. Kansas State University is an EEO/AA provider.

50% recycled fiber, including 20% post-consumer waste



## New rule in draft stage

A new rule, the autobody refinishing area source MACT, is currently in draft stages and will likely regulate hazardous air pollutants from all entities engaged in automobile and mobile equipment refinishing. This includes collision repair shops, fleet maintenance facilities, and others.

It is expected the rule will be published for public review in the spring of 2007. To read more about this rule, go to [www.epa.gov/ttn/atw/area/auto/autobody\\_refinishing\\_faq\\_03-02-2006.pdf](http://www.epa.gov/ttn/atw/area/auto/autobody_refinishing_faq_03-02-2006.pdf).

### **What do I do about wood waste?**

Is your industry burdened by excess wood waste? Do you generate more scrap wood or pallets than you can reuse, and then have difficulty disposing of them? This is a common problem throughout the country, and unfortunately, this valuable natural resource often ends up taking up valuable landfill space or is burned illegally, negatively impacting the environment. A new fact sheet that details Kansas-specific wood waste recycling and disposal options can be found at [www.sbeap.org/ppi/industry/general.htm](http://www.sbeap.org/ppi/industry/general.htm).

## Other area source standards under development

EPA is developing new standards to control toxic air pollutants from area sources. According to EPA's Air Toxics Web site at [www.epa.gov/ttn/atw/urban/arearules.html](http://www.epa.gov/ttn/atw/urban/arearules.html), "area sources are those sources that emit less than 10 tons annually of a single hazardous air pollutant or less than 25 tons or more annually of a combination of hazardous air pollutants. The Clean Air Act (CAA) requires EPA to identify a list of at least 30 air toxics that pose the greatest potential health threat in urban areas, and for the Strategy, EPA identified a list of 33 air toxics. The CAA also requires EPA to identify and

list the area source categories that represent 90 percent of the emissions of the 30 urban air toxics associated with area sources and subject them to standards under the CAA (section 112(d)). Through three separate listings (including a list in the Urban Air Toxics Strategy), EPA has identified a total of 70 area source categories which represent 90 percent of the emissions of the 30 listed air toxics. Of these 70 area source categories, 16 have been regulated and the remaining area source standards are under development or will be developed in the future. EPA was recently put on a court order schedule to issue the area source rules listed under the Urban Air Toxics Strategy." ❄

### **Updated air quality regulations now available**

The Bureau of Air and Radiation is in the process of updating its regulations. An August 2006 update is now available at [www.kdheks.gov/bar/download/KS\\_AQ\\_REGS.pdf](http://www.kdheks.gov/bar/download/KS_AQ_REGS.pdf).

One revised section of the regulation is KAR 28-19-350. This portion of the air quality regulations addresses the prevention of significant deterioration (PSD) of air quality. This requirement applies to construction and major modifications of major stationary sources located in areas of attainment or unclassified areas. The new regulation is posted at [www.kdheks.gov/bar/download/28-19-350.pdf](http://www.kdheks.gov/bar/download/28-19-350.pdf).

An SBEAP document that summarizes proposed and recent BAR regulatory changes, Bureau of Air and Radiation, Changes for the Future, is posted at [www.sbeap.org/ppi/publications/BAR\\_changes.pdf](http://www.sbeap.org/ppi/publications/BAR_changes.pdf).

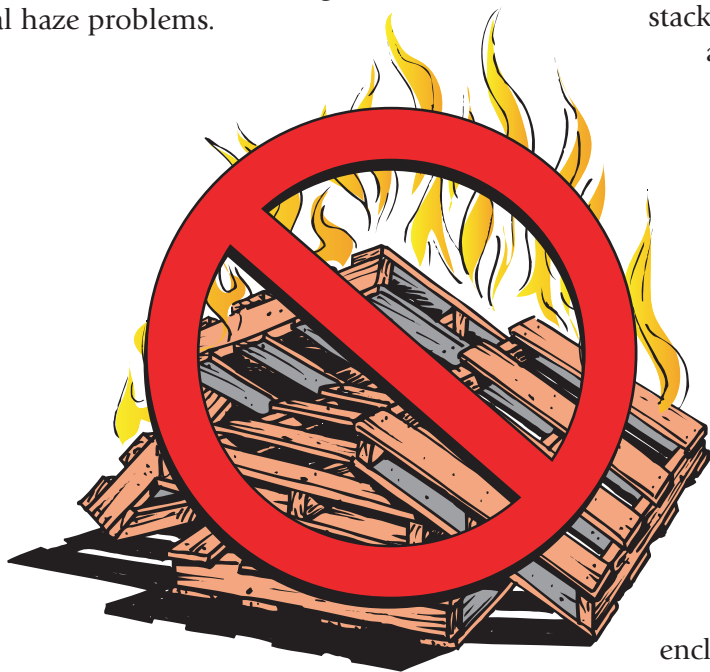
# Open burning—why is it regulated?

Open burning is regulated in an effort to prevent release of contaminants into the air. Burning typically releases very fine particulate matter, carbon monoxide, sulfur oxides, nitrogen oxides, and volatile organic compounds. These pollutants can promote an increased risk of cancer and lung disease, especially in children and the elderly. Open burning operations also contribute to regional haze problems.

any type of open burning on your property. Specific exemptions can be found at [www.epa.gov/Region7/programs/air/air/rules/kansas/2819-647.pdf](http://www.epa.gov/Region7/programs/air/air/rules/kansas/2819-647.pdf).

## Defining open burning

“Open” burning is the burning of materials where the products of combustion are released directly into the air without going through a stack or chimney attached to an



Open burning, including use of old “incinerators,” is no longer allowed in most cases within Kansas. The Kansas Department of Health and Environment (KDHE) has regulations prohibiting open burning of any wastes, structures, vegetation, or other materials on any premises. Unless you fall under a specific exemption to the regulation (such as agricultural burning of vegetation) or get approval from KDHE, you may NOT practice

enclosed chamber. If the products of combustion are somehow reduced or controlled before being released into the air, it is considered a modified open burning operation and is not subject to the same regulations. Local “burn” permits are not the same as open burning approvals, and it is important that businesses understand the difference between the two types. Open burn approvals are only issued by KDHE through one of the six district offices at

[www.kdheks.gov/befs/dist\\_office.html](http://www.kdheks.gov/befs/dist_office.html), or through contracted local health agencies if you reside in Wyandotte, Shawnee, Johnson, or Sedgwick counties.

## Alternatives to open burning

There are several alternatives to open burning. The best of these is to reduce, reuse, or recycle materials whenever possible. Reusing pallets and decreasing overall demand for pallets is the best way to prevent generating waste. Some facilities in Kansas rebuild pallets and composting is an alternative for materials such as cardboard, wood waste, paper, and food waste. Kansas now has many composting operations throughout the state that may be able to take waste and turn it into a resource. These facilities are listed in a solid-waste database at [www.kdheks.gov/waste/index.html](http://www.kdheks.gov/waste/index.html). To read more about wood waste alternatives, see the SBEAP fact sheet on wood waste reduction at [www.sbeap.org/ppi/industry/general.htm](http://www.sbeap.org/ppi/industry/general.htm).

To learn more about open burning, including types of open burning allowed and frequently asked questions, go to the new SBEAP “Open burning—when is it allowed?” fact sheet at [www.sbeap.org/ppi/industry/general.htm](http://www.sbeap.org/ppi/industry/general.htm). If you have additional questions about open burning or need to look into obtaining an air quality permit, contact SBEAP at 800-578-8898 or BAR at 785-296-1570. ☼

# High-energy small businesses



According to EPA's Energy Star program for small businesses, the following small businesses are energy intensive:

- bakeries
- dry cleaners
- auto repair shops
- recycling businesses
- Internet companies
- healthcare
- beauty salons
- paint, glass, and wallpaper stores
- grocery stores
- furniture and home furnishing stores
- apparel and accessory stores
- restaurants
- hotels and lodging
- barber shops
- laundromats
- pubs

When compared to other businesses based on square-footage space, these industry types consume more energy. Increased energy consumption means higher costs to your business and ultimately increases emissions to the environment. Sometimes simple inexpensive changes to lighting, HVAC, and employee practices can add up to financial and environmental savings.

Want to compare your energy use with other similar industries? Go to [www.energystar.gov/index.cfm?c=small\\_business.sb\\_calculate](http://www.energystar.gov/index.cfm?c=small_business.sb_calculate) to find out how your small business energy usage compares to other similar businesses in your area with EPA's On-line Energy-Use Comparison Calculator. ☼

## Did you know?

Most of us know that ozone caused by vehicles contributes to air pollution and that making a few changes can have a positive impact for air quality. According to "It all adds up to cleaner air" at, [www.italladdsup.gov/drivers/index.asp](http://www.italladdsup.gov/drivers/index.asp), ... "a well-maintained vehicle produces 20% less ozone-related emissions, saves money on gas, and means less traffic congestion due to breakdowns. In addition, properly inflating your tires can save you up to 18 gallons of gas per year. Carpooling, using transit, walking or bicycling—just one day a week for a year—can save the typical commuter about 1,200 miles on his or her vehicle and about \$455 in total driving costs. The savings could really add up!"

## Questions about your air permit?

BAR has assigned a permit contact for each facility in Kansas that has an air permit. If you have a question about your air permit, you can find your facility's BAR permit contact listed at [www.kdheks.gov/air-permit/forms/source\\_responsibilities2.pdf](http://www.kdheks.gov/air-permit/forms/source_responsibilities2.pdf). SBEAP staff may also be able to help. Call the SBEAP hotline at 800-578-8898.

## Need a P2 intern?

### Sign up now for summer '07

The Pollution Prevention (P2) Intern Program is designed to link top-level engineering and environmental sciences students with business and industry. These collaborations will focus on projects to reduce industrial emissions and wastes, while benefiting the Kansas environment.

If your business has wanted to explore P2 opportunities but hasn't had the time or resources, the P2 Intern Program represents a unique opportunity to make headway on that costly environmental headache or new project. Business applications will be accepted until Jan. 31, 2007, and are available at [www.sbeap.org/internships.html](http://www.sbeap.org/internships.html).

# Air Quality 102 Emissions Workshops—coming in February

Do you have your head in the clouds when it comes to calculating your potential to emit (PTE)? Do you know what an emission unit or source is? Do you understand regulatory requirements for air permits? Maybe you are doing well managing your air emissions, but would you like to identify ways to reduce your emissions and possibly your regulatory requirements?

Air quality regulations in the state of Kansas have been around since the 1980s, but their complexity and the process of determining how they apply to your facility can be quite confusing. The Kansas Department of Health and Environment (KDHE) and the Small Business

Environmental Assistance Program (SBEAP) can help you. The SBEAP has scheduled the following Air Quality 102 Emissions Workshops:

- Feb. 7, 2007; Salina, Bicentennial Center
- Feb. 13, 2007; Wichita, Sedgwick County Extension Office
- Feb. 28, 2007; Overland Park, KU Edwards Campus, Regents Center

These workshops are designed to aid small businesses in all aspects of air quality. They will provide a history of air regulations in the United States and an overview of the KDHE air program, including recent and proposed changes to the air regula-

tions. You will learn methods to calculate your facility's PTE and how to identify whether you require a construction permit, approval, or registration. Discussion will center on the various air operating permits with help in determining which permit is most appropriate for your facility. The workshops include real-life examples so that you can get involved in actual calculations, not just academic theory. Discover pollution prevention methods to reduce your air emissions and qualify your facility for a less-restrictive air permit.

To register, call the SBEAP at 800-578-8898, or go to [www.sbeap.org](http://www.sbeap.org) and click on **Air Quality 102 Workshops**. ❄️

## ***MEK delisted as a hazardous air pollutant***

Last December, EPA removed methyl ethyl ketone (MEK) from the list of hazardous air pollutants (HAPs) under Section 112.

MEK is a solvent used in many industry chemicals including vinyl lacquers, cleaning fluids, adhesives, printing inks, and other products. Although delisted as a HAP, MEK will still be regulated as a volatile organic compound (VOC).

A petition to delist MEK was originally brought to EPA by the American Chemistry Council in 1996. EPA based its decision on its determination that exposure to MEK "may not reasonably be anticipated to cause human health or environmental problems."

MEK is the fourth pollutant that has been removed from the HAP list. Caprolactam was delisted in 1996, followed by long-chain glycol ethers in 2000 and ethylene glycol monobutyl ether in 2004.

KDHE has updated its HAP list, noting these delistings. View a copy of the KDHE HAP list at [www.kdheks.gov/emission/download/APP\\_B\\_2005.pdf](http://www.kdheks.gov/emission/download/APP_B_2005.pdf).

## Dear EnviroMike:

In approximately six months, we plan to expand our painting and coating facility by adding several paint booths. I attended environmental regulatory training at a recent KDHE environmental conference and learned about some air regulations of which I was previously unaware. Because of the upcoming modifications at our facility, we need to determine whether we need a construction permit. Actually, I learned we should have made this determination when we first built our paint shop.

Do I need to evaluate the increase in potential air emissions from only the new paint booths, or do I need to look at all my potential emissions, since we've never applied for a construction permit?

— Signed,  
Perplexed Painter Paul

Dear Paul,

It's good to hear you attended the regulatory training at the annual environmental conference. It's nice to see people taking advantage of this valuable KDHE service. As you learned at the conference, proposed construction projects at new facilities and modifications at existing facilities must be evaluated to determine which air regulations apply, if any. This process must occur before construction or operations can begin at the facility. It is possible for a business to need either a construction permit or construction approval.

The simple answer to your question is, if you've never applied for a construction permit or approval, and you are now planning to make modifications to the facility that will increase air emissions, you must evaluate all existing and anticipated air emissions generated at your site.



This evaluation includes emissions generated from your paint shop and any other air-emitting process at your site, including potential sources such as sand-blasting operations and fuel-powered boilers, heaters, and emergency generators. The need for a permit or approval depends on whether your calculated potential to emit (PTE) exceeds specified thresholds for certain pollutants (see SBEAP fact sheet, "What Is the Kansas Air Quality Act?" found at [www.sbeap.org/ppi/industry/general.htm](http://www.sbeap.org/ppi/industry/general.htm)).

You may also need an approval if the new or modified source is subject to a new source performance standard (NSPS), a maximum achievable control technology (MACT) standard, or a national emission standard for hazardous air pollutants (NESHAP). The primary differences between a permit and an approval are that the PTE thresholds are lower for an approval and the permit requires an application fee, while the approval (which indicates fewer emissions) does not. Application forms are available on the KDHE Web site at [www.kdheks.gov/air-permit/download.html](http://www.kdheks.gov/air-permit/download.html).

You may begin construction at your facility only when KDHE has processed your permit or approval. If, after your initial construction, you make modifications that have the potential to increase your PTE, you must apply for another permit or approval, again based on the PTE thresholds mentioned above. New regulations clarify those activities that are not considered "modifications" (see SBEAP fact sheet, "Bureau of Air and Radiation Changes for the Future" found at [www.sbeap.org/ppi/industry/general.htm](http://www.sbeap.org/ppi/industry/general.htm)).

As always, don't hesitate to call us at 800-578-8898 for more information. ☀

# AIRlines events calendar

**KDHE Hazardous Waste Generator Workshop,**  
10 workshops in six locations throughout Kansas during  
November 2006; register at  
[www.kdheks.gov/waste/training/hwgenworkshopsfall06.pdf](http://www.kdheks.gov/waste/training/hwgenworkshopsfall06.pdf).

**Hospitals for a Healthy Environment Workshop,**  
Dec. 7, 2006; Kansas City, Kan.; register at  
[www.sbeap.org/workshops.html](http://www.sbeap.org/workshops.html).

**Pollution Prevention Intern Program,**  
industry applications due Jan. 31, 2007; apply at  
[www.sbeap.org/internships.html](http://www.sbeap.org/internships.html).

**Air Quality 102 – Air Emissions Workshop;**  
Feb. 7, 13, and 28, 2007; Salina, Wichita, and Overland Park,  
Kan., respectively; register at [www.sbeap.org/workshops.html](http://www.sbeap.org/workshops.html).

**Beyond Rehab the Lab: Micro-Scale and Green Chemistry  
Workshop;**  
April 13, 2007; Salina, Kan.; watch  
[www.sbeap.org/workshops.html](http://www.sbeap.org/workshops.html) for more information.

**Several monthly Environmental Health and Safety  
Networks** meet regularly around the state.  
Go to [www.sbeap.org/ppi/calendar.asp](http://www.sbeap.org/ppi/calendar.asp).

## ***Favorite Places—Web sites***

**KDHE Bureau of Air and Radiation –**  
[www.kdheks.gov/bar/index.html](http://www.kdheks.gov/bar/index.html)

**National Small Business Environmental Assistance  
Program –** [www.smallbiz-enviroweb.org/](http://www.smallbiz-enviroweb.org/)

**Environmental Protection Agency –** [www.epa.gov/](http://www.epa.gov/)

**Air Toxics, final MACT standards –**  
[www.epa.gov/ttn/atw/mactfnl.html](http://www.epa.gov/ttn/atw/mactfnl.html)

**Kansas Small Business Environmental Assistance  
Program –** [www.sbeap.org](http://www.sbeap.org)

## **Where to turn...**



For regulatory assistance with general technical information, MACT standards, or air permitting, please contact the air permit writer (KDHE Bureau of Air and Radiation) assigned to your facility at 785-296-1570. You can also check the KDHE air permit program Web site, <http://www.kdhe.state.ks.us/air-permit/index.html>, for contact information.

For free, confidential, nonregulatory assistance with air-related questions, fact sheets, or other general information, contact the K- State University Small Business Environmental Assistance Program (SBEAP) through the toll-free hotline at 800-578-8898.

If you have a question or concern, or are unsure of whom to call for help, contact the Office of the Public Advocate at 800-357-6087; or in Topeka, call 785-296-0669.



**Pollution Prevention Institute**  
133 Ward Hall  
Manhattan, KS 66506-2508