

# The Breeze

COMMUNITY

Spring 2006

Volume 5 / Issue 2

Hamilton County Environmental Services Air Quality Management Division

## Clean Fuels Reduce Air Pollution in Southwest Ohio

by Nan McKenna, Public Affairs Specialist

Biofuels such as ethanol and biodiesel have recently received national attention from the president, car manufacturers and environmental organizations. With all of this national buzz, what role do biofuels play in the fuel landscape of the tri-state?

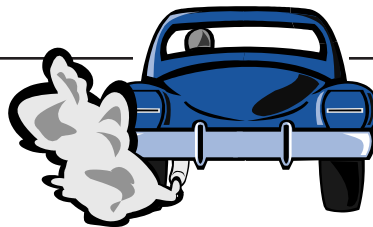
They play a larger role than most people may think, and their role is primed for growth.

Several local government agencies and school districts already fuel their fleets with biodiesel or ethanol. The city of Cincinnati uses E85, a blend of 85% ethanol and 15% gasoline, in over 270 cars in its fleet.

"Biofuels are great for the environment. The city has to be good stewards of air quality and needs to set the example for the citizens of Cincinnati," says Jim Schwab, fleet services manager for the city of Cincinnati.

The Cincinnati Park Board fuels over 120 of its fleet vehicles with biodiesel.

On February 1st, Campbell County Schools (CCS) in Northern Kentucky began using B20, a blend of 20% biodiesel and 80% petroleum diesel, in 75 of its school buses. CCS transportation officials anticipate using 63,000 gallons of biodiesel between February 1 and June 30, 2006.



## Smog Season Starts

Sunny skies may give everyone a pinch of spring fever but they also mark the beginning of smog season. Smog is a problem in Southwest Ohio and one that should be taken into consideration before participating in outdoor activities and chores. From April 1st through October 31st, the HCES staff monitors ozone and particulate matter concentrations for potential smog formation.

When weather conditions indicate possible high smog levels in the area, a Smog Alert will be announced through local television, radio and newspapers. During Smog Alert days, take steps

such as riding the bus, carpooling and refueling after 6:00 p.m. to reduce the amount of smog formed throughout the day.

Smog affects everyone, especially children and the elderly. Smog can irritate the mucous lining of the throat and lungs and aggravate respiratory illnesses such as asthma and bronchitis.

For more information on Smog Alerts, the Air Quality Index or other air quality issues, please visit HCES' website at [www.hcdoes.org](http://www.hcdoes.org).

## Table of Contents

- Permits & Enforcement:..... Pg. 2
- Air Quality Calendar: ..... Pg. 3
- Air Quality Statistics: ..... Pg. 4
- Monitoring & Analysis: ..... Pg. 4

The use of B20 results in a 20% reduction of unburned hydrocarbons, a 12% reduction of carbon monoxide and a 12% reduction in particulate matter compared to emissions from diesel fuel. The use of ethanol reduces emissions of all major pollutants regulated by the U.S. Environmental Protection Agency, including ozone, carbon monoxide, particulate matter and oxides of nitrogen.

As for individual consumers, biodiesel users can refuel at any of the six local gas stations that carry biodiesel. The stations range from as far north as Franklin, Ohio, to as far south as Independence, Kentucky. According to Kim Lahman, Tri-State Clean Fuels Network (TSCFN) coordinator, two more local stations will add biodiesel to their fuel options within the next year.

**Clean Fuels** continued on pg. 6

## Acronym Guide

<b>HCES:</b>	Hamilton County Environmental Services
<b>AQMD:</b>	Air Quality Management Division
<b>OAQPS:</b>	Office of Air Quality Planning and Standards
<b>PM:</b>	Particulate Matter
<b>MEK:</b>	Methyl Ethyl Ketone

# Permits & Enforcement

## LANXESS Update

by Nan McKenna, Public Affairs Specialist

On December 29, 2005, LANXESS Corporation filed an appeal to the December 5 findings and orders issued by the Ohio EPA. The Ohio EPA determined that "an unacceptable health risk is posed by long-term (30 to 70 years) exposure to levels of certain volatile organic compounds (VOCs)" found in the ambient air around LANXESS.

LANXESS chose to appeal the findings and orders based on several reasons, stating that the orders are not in accord with Ohio law or the Clean Air Act, have caused unnecessary public alarm and

are based on erroneous data. Further explanation of the appeal is available on LANXESS' website at [www.us.lanxess.com/news](http://www.us.lanxess.com/news).

In November of 2005, voters passed a levy that committed to the closing of either Meredith Hitchens or Miami Heights Elementary. Hitchens closed temporarily in December of 2005 after the Ohio EPA released its findings from the LANXESS study. On January 23, 2006, the Three Rivers School Board voted to permanently close Meredith Hitchens Elementary School, located

across the street from LANXESS. Hitchens' closing fulfills the levy provision.

For more information on the air quality monitoring program in Addyston, call Susan Aman at the Ohio EPA's Public Interest Center at (614) 644-2160 or email Susan at [susan.aman@epa.state.oh.us](mailto:susan.aman@epa.state.oh.us). To view monitoring data collected in Addyston, please visit the AQMD's website at [www.hcdoes.org](http://www.hcdoes.org). Further information can also be found by visiting the Ohio EPA's website at [www.epa.state.oh.us](http://www.epa.state.oh.us).

## Tougher Particulate Matter Standards Proposed

by Nan McKenna, Public Affairs Specialist

On January 17, 2006, the U.S. EPA published a proposed rule to toughen the nationwide standards for particulate matter (PM) measuring 2.5 microns or smaller.

The proposal recommends lowering the 24-hour PM<sub>2.5</sub> standard from the current level of 65 microns per cubic meter ( $\mu\text{g}/\text{m}^3$ ) to 35  $\mu\text{g}/\text{m}^3$ . Under this new standard, the acceptable level of exposure to PM<sub>2.5</sub> in a 24-hour period cannot exceed 35  $\mu\text{g}/\text{m}^3$ . The annual standard, or the acceptable level of exposure to PM<sub>2.5</sub> averaged over a year, would remain at 15  $\mu\text{g}/\text{m}^3$ .

The U.S. EPA's stricter 24-hour standard is meant to better protect the public from short-term health effects associated with exposure to PM<sub>2.5</sub>. Some of these health effects include

aggravated asthma, chronic bronchitis, irregular heartbeat, heart attack and premature death in people with heart or lung disease.

The Clean Air Scientific Advisory Committee (CASAC), an advisory group to the U.S. EPA, has recommended stricter limits of 30  $\mu\text{g}/\text{m}^3$  daily and 13  $\mu\text{g}/\text{m}^3$  annually. State and local air quality groups have expressed support for CASAC's recommended standards. CASAC members believe the proposed standards will not adequately protect Americans from the short-term and long-term health effects of PM<sub>2.5</sub> exposure.

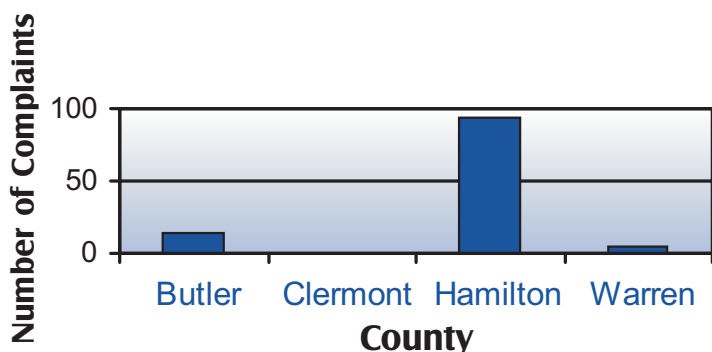
The U.S. EPA accepted public comments on the proposed rule until April 17, and may use those comments, along with any new research, to revise

the proposal. The U.S. EPA will issue the final standards by September 27, 2006.

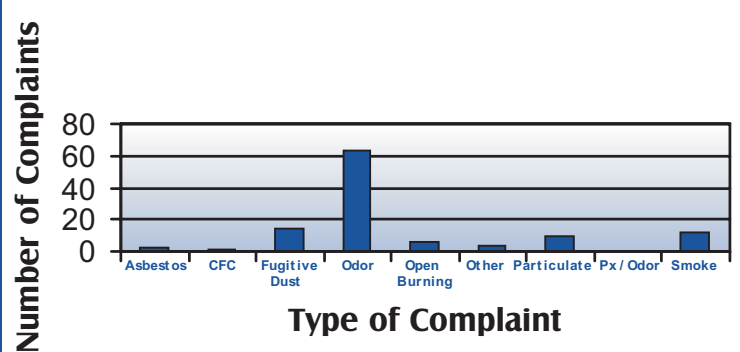
Southwest Ohio is in attainment for the current 24-hour PM<sub>2.5</sub> standard of 65  $\mu\text{g}/\text{m}^3$ . In 2004, Southwest Ohio's maximum 24-hour PM<sub>2.5</sub> reading was 46.8  $\mu\text{g}/\text{m}^3$ . If this level of PM<sub>2.5</sub> continues to be reported, the area would not be in attainment under the new standards. The U.S. EPA may require an area in non-attainment to develop stricter regulation of PM<sub>2.5</sub> sources. Some of these sources include power plants and factories.

For more information on particulate matter and the proposed standards, please visit the U.S. EPA's PM website at [www.epa.gov/air/particlepollution](http://www.epa.gov/air/particlepollution).

October - December 2005



October - December 2005



## Biofuels Bloom at the Flower Show

by Kim Lahman, Clean Cities Coordinator



Tri-State Clean Fuels Network (TSCFN) will take part in an exciting new exhibit featuring soy biodiesel and ethanol fuels in a theme garden at the 17th Annual Cincinnati Flower Show. The exhibit will be located in the Grand Marquee.

TSCFN, in collaboration with the Cincinnati Park Board, will introduce the connection between soy bean and corn plants and the production of fuel. The display will convey the message that soybeans and corn are viable options for fuel resources.

Features of the display include a GMC Yukon powered by E85 and a pond of biodiesel, a fuel for diesel engines produced from domestic

renewable sources such as soy bean or other vegetable oils. Both fuels are clean-burning and reduce greenhouse gas emissions.

Yellow and green colors will dominate the display to coordinate with GM's current flex fuel vehicle campaign of "Live Green, Go Yellow." The exhibit is also sponsored by Cargill AgHorizons, Katzen International, Inc., the Ohio Soybean Council, the Ohio Corn Marketing Program and the City of Cincinnati. Come by and visit TSCFN at the Cincinnati Flower show located at Lake Como in Coney Island from Saturday, April 22, through Sunday, April 30.

## Education and Outreach News

As your organization or community begins to plan your festival or fair, please keep the AQMD in mind as a possible exhibitor at the event. When scheduling allows, AQMD staff members can set up a table-top display and distribute information about air quality and the AQMD. Contact Nan McKenna at (513) 946-7754 or at [nan.mckenna@hamilton-co.org](mailto:nan.mckenna@hamilton-co.org) to have the AQMD visit your event.

HCES' education partnership with Crystal Clear Science has been a great success, reaching over 800 students at fifteen schools. Michelle White's air quality presentations engage students with exciting experiments, while teaching them ways they can do their share for cleaner air. Openings in May are still available – to end the school year with a fun-filled and educational program, call Michelle White with Crystal Clear Science at (513) 553-2252 or email her at [crystalclearscience@direcway.com](mailto:crystalclearscience@direcway.com).

**Ethanol:** An alcohol-based fuel produced by fermenting and distilling starch crops that have been converted into simple sugars.

**Biodiesel:** A domestically produced, renewable fuel that can be manufactured from vegetable oils and animal fats.

*air*  
**Lingo**

## Air Quality Events & Meetings

### Public Meetings

Please visit our calendar at [www.hcdoes.org](http://www.hcdoes.org) or call (513) 946-7777 for more information about public meetings.

### Upcoming Events

#### EARTH DAY CELEBRATION SPONSORED BY THE GREATER CINCINNATI EARTH COALITION

**Date:** Saturday, April 22, 2006  
**Time:** 1:00 p.m. - dark  
**Location:** Sawyer Point  
701 Pete Rose Way  
Cincinnati, OH 45202

#### HAMILTON COUNTY ENVIRONMENTAL ACTION COMMISSION (HCEAC)

**Date:** Thursday, May 4, 2006  
**Time:** 1:30 p.m. - 4:00 p.m.  
**Location:** Hamilton County  
Environmental Services  
250 William Howard Taft  
Road Cincinnati, Ohio  
45219

#### COMPOST BIN SALE

**Date:** Saturday, May 13, 2006  
**Time:** 9:00 a.m. - 2:00 p.m.  
**Location:** Cincinnati State  
3520 Central Parkway  
Cincinnati, OH 45223

#### AND

**Forest Park Square**  
1212 W. Kemper Road  
Cincinnati, OH 45240

#### AIR QUALITY POLICY ADVISORY COMMITTEE (AQPAC)

**Date:** Wednesday, May 17, 2006  
**Time:** 1:30 p.m. - 3:00 p.m.  
**Location:** Hamilton County  
Environmental Services  
250 William Howard Taft  
Road, Cincinnati, Ohio  
45219

### Web Updates

Please visit our website at [www.hcdoes.org](http://www.hcdoes.org) or call (513) 946-7777 for updates!

# Monitoring & Analysis

## A Year at OAQPS

by Anna Kelley, Quality Assurance and Monitoring Coordinator

On March 19, 2004, I found myself driving to Cary, North Carolina, ready to embark on a new adventure. I was beginning an Intergovernmental Personnel Act (IPA) assignment with the Monitoring and Quality Assurance Group (MQAG) at the Office of Air Quality Planning and Standards (OAQPS) at Research Triangle Park, North Carolina.

The purpose of an IPA is to allow federal, state and local government employees to gain valuable experience working in different levels of government while working on assignments beneficial to all parties. One project I oversaw was the revision of "The Red-book," a guidance document for ambient air monitoring organizations throughout the U.S. Most of my time was spent researching the relevant ambient air monitoring regulations within the Code of Federal Regulations (CFR) and writing proposed changes to the guidance document incorporating comments and new monitoring technologies.

Another major Quality Assurance (QA) project I assisted with was the Precursor Gas Monitoring Team. My role was not only to provide QA representation on the team, but also to work with the team to provide local insight into the feasibility and adaptability of the program. Precursor Gas Monitoring is a part of the New Monitoring Strategy developed with stakeholders and the EPA to address pollutants that are of concern, such as sulfur dioxide, carbon monoxide, total nitrogen oxides, ammonia and nitric acid. In low levels, these gases contribute to the formation of either ozone or particulate matter or both. By focusing on these pollutants at lower levels, we will be better able to control ozone and particulate matter concentrations across the country.

I am truly grateful and humbled by the trust and confidence placed in me and my work by the OAQPS staff. The experience to live and work with them, to

**OAQPS** continued on pg. 6

## Air Toxics List Update

by Ron Henderson, Environmental Technician

The U.S. Environmental Protection Agency (U.S.EPA) has removed methyl ethyl ketone (MEK) from the list of toxic air pollutants. This action is being taken in response to a request from MEK producers and consumers to delete MEK from the hazardous air pollutants list.

The U.S. EPA made an initial determination based on

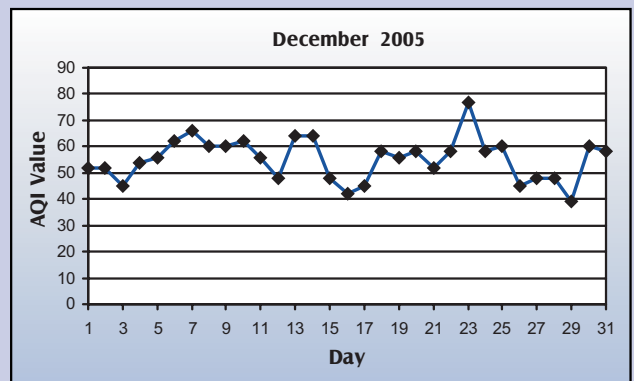
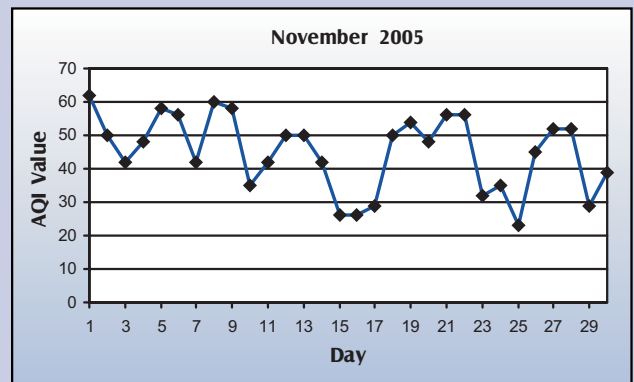
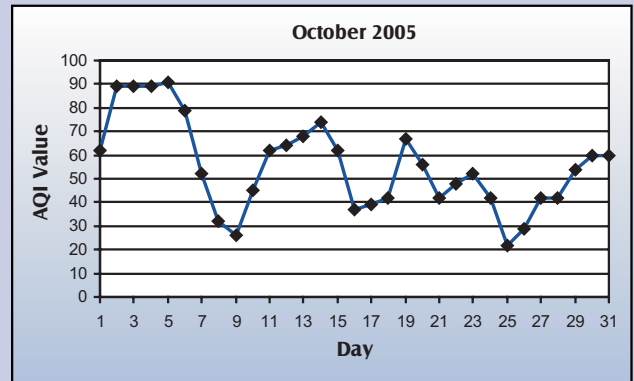
adequate data that MEK may not reasonably be anticipated to cause adverse human health or environmental effects. Emissions of MEK will continue to be regulated as a volatile organic compound because of its contribution to the formation of ground-level ozone. For more information on the air toxics list, please visit the U.S. EPA's website at [www.epa.gov/ttn/atw](http://www.epa.gov/ttn/atw).

## Programs & Resources Available

The AQMD has free air quality programs and resources available for all ages and groups. Be sure to remind your community groups, schools and libraries that they can request free resources or schedule presentations by calling (513) 946-7754. More information is always available on our website! Visit [www.hcdoes.org](http://www.hcdoes.org) for resources available online.

## Air Quality Index

The AQI uses numbers from 0 to 500. A higher AQI number corresponds with more air pollution in the air. 0-50 is good, 51-100 is moderate and a number of 101-150 is classified as unhealthy for sensitive groups such as children or the elderly. See [www.hcdoes.org](http://www.hcdoes.org) for more details.



## Stack Test Data

October	14
November	15
December	14
<b>Annual Total for 2005:</b>	<b>43</b>



## Celebrate Earth Day At Sawyer Point

Celebrate the 36th anniversary of Earth Day at Sawyer Point in downtown Cincinnati on Saturday, April 22nd, from 1:00 p.m. until dark. Bring the whole family and enjoy environmental exhibits, "Kids World," local bands, a rock climbing wall and much more! Be sure to visit the AQMD's booth to learn more about the region's air quality and to pick up free literature and giveaways! For more information about the Earth Day celebration, visit [www.earthcoalition.net](http://www.earthcoalition.net).

## Free Yardwaste Drop-Off Sites Now Open

The Hamilton County Solid Waste Management District (District) has announced the re-opening of the yardwaste recycling drop-off sites for 2006. **Hamilton County residents** can choose from the following three locations for free yardwaste recycling:

### East:

Turpin Farm, 3295 Turpin Lane (off Rt. 32) in Anderson Township

### West:

Kuliga Park, 6717 Bridgetown Road in Green Township

### North:

Rumpke Sanitary Landfill, Struble Road and Colerain Avenue in Colerain Township

All sites will be open March 25 through November 26, 2006, on Saturdays and Sundays, from 11:30 a.m. to 5:00 p.m. The Kuliga Park site will be closed on the following dates: June 10, July 1 and 2, and August 26, 2006. All sites will be closed on Sunday, April 16, 2006.

The Turpin Farm site (East location) is open for free yardwaste drop-off during regular business hours (Monday – Friday from 7:30 a.m. – 6:00 p.m.) in addition to the above hours of operation.

For more information, please call the Hamilton County Yardwaste and Composting Hotline at 946-7755, or visit [www.hamiltoncountyrecycles.org](http://www.hamiltoncountyrecycles.org).

## FREE Household Hazardous Waste Collection Program Underway

The 2006 Household Hazardous Waste Collection Program, sponsored by the Hamilton County Solid Waste Management District (District), is now underway. This free program is open to **Hamilton County residents only** and began on March 18th and will run through October 31, 2006. The two drop-off locations and dates are:

### Environmental Enterprises, Inc.

4650 Spring Grove Avenue  
Cincinnati, OH 45232

#### Hours:

Tuesdays: 2:00 p.m. – 7:00 p.m.  
Thursdays: 9:00 a.m. – 1:00 p.m.  
Saturdays: 9:00 a.m. – 1:00 p.m.

### Environmental Enterprises, Inc.

10163 Cincinnati-Dayton Road  
Cincinnati, OH 45241

#### Hours:

Wednesdays: 2:00 p.m. – 7:00 p.m.

Items **accepted** at the collection program include: paint, pesticides/fertilizers, solvents/thinners, lawn/pool chemicals, cleaners, household/auto batteries, prescription drugs, fire extinguishers, propane tanks, mercury, fluorescent bulbs, driveway sealer, gasoline, antifreeze, motor oil and thermostats.

Items **not accepted** at the collection program include: radioactive materials,

medical waste, explosives/ammunition, gun powder, heating oil tanks, tires, yardwaste, smoke alarms, garbage, roofing materials, appliances, computers/electronics and fuel tanks.

For more information about the collection program, call the Hamilton County Household Hazardous Waste Hotline at 946-7700 or visit [www.hamiltoncountyrecycles.org](http://www.hamiltoncountyrecycles.org).

## Staff Updates

### Newly Hired:

**Prabhat Lamichhane** is a new full-time Environmental Compliance Specialist. Prabhat previously worked part-time in Permits & Enforcement. Congratulations, Prabhat!

**Jeanie Cooper** is the new part-time receptionist. Jeanie also works at the Vernon Manor Hotel as an auditor and front desk clerk. Welcome, Jeanie!

### Anniversaries:

Since October, several AQMD employees have marked the anniversaries of their start dates at HCES. **Chris Boss**, **Mike Ploetz** and **Steve Damaska** have spent five years with the AQMD. **John Keenan** marked his fifteenth year at HCES in February. Congratulations and thank you for your years of hard work!

## Allergy Season: Why Start So Early?

by Steve Damaska, Laboratory Analyst

Winter has barely made its exit, and it's time to think about managing pollen and mold allergies. On February 13, 2006, the AQMD began monitoring the pollen and mold levels in Southwest Ohio's ambient air.

Why start so early in the year? February is the time when some trees common in Southwest Ohio, such as Cedar, Elm, Maple and Mulberry, naturally pollinate. Although a warmer February can

increase the amount of pollen produced by these trees, pollination will occur, regardless.

An allergy is an abnormal reaction to a very small amount of a specific substance. There are two main sources in nature from which airborne allergen particles originate: pollen and mold. The AQMD monitors daily levels of various airborne allergens.

Living with allergies can be miserable for those who suffer from them. Call the pollen and mold hotline after 10:00 a.m. daily at (513) 946-7753, or track counts at [www.hcdoes.org](http://www.hcdoes.org). Information provided is for the previous 24-hour period. Visit HCES' homepage under "Publications and Resources" to download the Living With Allergies brochure to learn more about minimizing reactions to pollen and mold.

### OAQPS *continued from pg. 4*

be considered one of them, was a gift. People were friendly, outgoing, positive and professional. They genuinely cared about the work they did and their co-workers. I am honored to have had the opportunity to meet and work with not only the staff at OAQPS, but also with ambient air monitoring and QA persons representing local, state and regional offices.

### Clean Fuels *continued from pg. 1*

With the recent news of the impending construction of "the world's largest" biodiesel plant in Indiana, the future of biofuels looks bright. The reduced dependence on foreign oil and the improved air quality will benefit everyone, especially the citizens of Southwest Ohio.

For more information on biofuels in Southwest Ohio, please visit the TSCFN's website at [www.cleancitiescincinnati.org](http://www.cleancitiescincinnati.org) or contact Kim Lahman at (513) 946-7772.

## HAMILTON COUNTY ENVIRONMENTAL SERVICES

250 William Howard Taft Rd.  
Cincinnati, Ohio 45219-2660  
[www.hcdoes.org](http://www.hcdoes.org)



The Breeze is published quarterly. Subscriptions are available at no charge. Please forward name and address to Hamilton County Environmental Services. Contact [nan.mckenna@hamilton-co.org](mailto:nan.mckenna@hamilton-co.org) for more information or call: (513) 946-7754, fax (513) 946-7779.