

[Print this article](#) | [Go back](#)

Thursday, April 21, 2005

## Ethanol benefits questioned

Homegrown fuel might worsen Louisville's air pollution

**By James Bruggers**

[jbruggers@courier-journal.com](mailto:jbruggers@courier-journal.com)

The Courier-Journal

Ethanol, a fuel that's backed by state and federal governments and viewed as a boon to corn farmers in the Midwest and South, may make it harder to breathe in Louisville this summer.

While governors in more than 25 states, including Kentucky and Indiana, tout it as a way to make gasoline burn cleaner, there's new evidence ethanol can worsen some types of pollution linked to damaging health effects -- namely ozone and fine particles.

And that could make it harder for cities like Louisville, where it already is being used, to meet air standards.

"There is growing evidence that when used in the summer with reformulated gasoline, ethanol actually creates more smog and fine-particle soot," said Frank O'Donnell, a longtime clean air advocate in Washington, D.C. "Ethanol has been oversold as a clean fuel."

His comments are backed by a new draft study from the California Air Resources Board, the nation's leading air pollution agency, and other reports.

But ethanol supporters cite different research to portray the fuel in another light.

"It's certainly a benefit to farmers to create a market (for ethanol) as well as to provide a clean, environmentally friendly and American-made fuel," said Todd Barlow, executive director of the Kentucky Corn Growers' Association, a partner in a new ethanol plant in Western Kentucky. "Science has documented the overall benefits of ethanol."

By all accounts, it reduces carbon monoxide, a wintertime concern in some parts of the country, though not Louisville. And depending on how it's made, ethanol in gas can produce fewer emissions that are blamed for global warming.

Its advocates see ethanol as a renewable fuel made from homegrown crops like corn, and say its use can help reduce American dependence on foreign oil. And in recent months, wholesale ethanol has been cheaper than wholesale gas.

The ethanol debate is the latest in Kentucky's 12-year saga over reformulated gas, which began when former Gov. Brereton Jones announced the new fuel mixture would be sold in the Louisville area and Northern Kentucky. He had voluntarily signed Kentucky onto a 1990 requirement that gas sold in the smoggiest areas needed to contain 2 percent of an oxygen-rich additive to cut tailpipe exhaust.

MTBE was favored first, but after it was found to pollute water across the country several states banned it; in Kentucky, the ban goes into effect Jan. 1.

That's all started a new push for ethanol, which has largely pitted farm states that produce corn against coastal states that import ethanol to meet the federal rule.

### **Critics in California**

The nation's most vocal critics of ethanol come from California, a state that has led the nation in adopting tough air pollution rules, but one that also produces little ethanol and has been concerned about its transportation costs.

"Ethanol really doesn't do anything for fuel anymore," said Jerry Martin, a spokesman for the California air board, which has been locked in a six-year legal battle with the U.S. Environmental Protection Agency over permission to stop using an ethanol mixture. Two years ago, the 9th U.S. Circuit Court of Appeals ordered the EPA to reconsider its denial of California's request.

Martin said oil companies have developed improved formulas for making gasoline that burns more cleanly without ethanol or MTBE. And newer cars, with on-board diagnostic equipment and better emissions controls, no longer need either additive, he said.

The California air board's draft study argues that fuel with ethanol more easily turns into vapors, which escape from fuel tanks and lines, resulting in an increase in emissions of hydrocarbons, and that it adds nitrogen oxides, which contribute to both smog and fine-particle pollution.

Its study echoed a 1999 National Research Council panel that concluded that neither ethanol nor MTBE did much to reduce smog, and a 2001 study by a coalition of Northeastern states that said wide replacement of MTBE with ethanol could result in additional ozone and toxic emissions.

Cornell University ecology and agricultural sciences professor David Pimentel estimates that ethanol has benefited from a \$1.4 billion subsidy while degrading the environment and diverting a crop better suited for food.

He has calculated ethanol takes more energy to produce than it yields, which he said makes it difficult to describe as a renewable resource; that it causes water pollution from fertilizers and pesticides on corn crops; and causes air pollution at ethanol plants.

"I argue good science cannot compete with politics and big money," he said.

The EPA is reviewing several studies of ethanol -- from critics and the industry -- said John Millett, EPA spokesman.

"For EPA right now, there are too many uncertainties ... to determine ethanol's overall effect on ozone," he said, adding that the agency still believes it improves overall air quality.

### **'A political situation'**

But seizing on the controversy, some Kentucky ethanol critics say they want it taken out of gas.

"It's basically a political situation for primarily the Midwestern states wanting markets for their corn," said John Riley, who was a leader in the successful effort to end motor vehicle emissions testing in Louisville.

Air pollution regulators in Kentucky say they're hearing more complaints about ethanol but have no plan to stop its use.

"The country often looks to California" when it comes to air quality, said John Lyons, director of the Kentucky Division of Air Quality. "Maybe they are on to something. Maybe they are not."

Any change would require permission from the EPA and possibly pollution reductions from other sources, Lyons said.

Gov. Ernie Fletcher's new energy plan, meanwhile, describes ethanol as a "high-octane fuel that delivers improved vehicle performance while reducing emissions and improving air quality." He wants the state fleet of vehicles to use a 10 percent ethanol blend, where available.

At the same time, Kentucky's ethanol production and use grows.

Farmers who grow corn for ethanol see their work in patriotic terms, helping to reduce the nation's dependence on foreign oil, said Wayne Hunt, a farmer and member of the board of managers for Commonwealth Agri-Energy in Hopkinsville, which opened a year ago with grants and loans from the Kentucky Agricultural Development Board and plans to raise its annual production from 23 million to 30 million gallons.

"It could have such a major impact on this country," said Hunt, who lives in Christian County.

Barlow, with the corn growers group, said farmers selling corn for ethanol in Kentucky are getting an extra 5 or 10 cents per bushel, which, for a 1,500-acre farm, could mean \$9,000 to \$18,000 more a year.

Indiana has one main ethanol plant, in South Bend. The Renewable Fuels Association, a trade group for the ethanol industry, estimates Indiana produces 100 million gallons per year of the fuel.

"It's not just about air quality," noted Melissa Howell, executive director of the Kentucky Clean Fuels Coalition, a nonprofit group that promotes the use of alternative fuels. "You have to look at the big picture."

[^^ Back to top](#)

[Print this article](#) | [Go back](#)