

Air Compliance News™

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From the Desk of...

Phil Billick

*President
Air Compliance Testing, Inc.*

Open Path Remote Sensing Technology

Imagine being able to measure:

- fugitive emissions coming up through the soil on the surface of a landfill.
- the fence-line concentration (*and max flux rate*) of a pollutant real-time.
- the concentration of a contaminant in a plume of emissions 50' after it leaves your stack.
- multiple pollutants, simultaneously, with real-time results from a 200' stack... all from the comfort of your parking lot.

Optical Remote Sensing of ambient air using Open-Path FTIR spectroscopy and other optical technologies is making events like this possible. Open-Path FTIR is able to provide real-time, simultaneous analysis of up to several dozen gaseous contaminants. The technology works on the same principle as classical laboratory FTIR spectroscopy, except instead of injecting the sample into a cell, it "samples" directly into the open atmosphere. A beam of light spanning a range of wavelengths in the near-IR portion of the electromagnetic spectrum is sent from the transmitter to a "retroreflector," (*an array of corner-cubed mirrors*), that directs the beam and back to the receiver. One-way path lengths can also be used if there is an existing source of infrared light (*i.e., a hot gaseous plume*).

Path length is one of the contributing factors to detection limits and typically range from less than 10 meters (*used for source stack monitoring with mdl's in the ppm range*) to several hundred meters or more (*which is typically required for many ambient air applications with expected concentrations in the low ppb range*).

I am interested in learning about your applications and would enjoy the opportunity to apply this fantastic technology to help solve your emissions measurement problems.



EPA Signs Most Stringent Ozone Standard

On March 12, 2008 EPA signed the most stringent 8-hour standard ever for ozone. The agency based the changes on the most recent scientific evidence about the effects of ozone, the primary component of smog.

The new primary and secondary 8-hour standards are set at 0.075 parts per million (*ppm*). The previous primary and secondary standards were identical 8-hour standards, set at 0.08 ppm. Because ozone is measured out to three decimal places, the standard effectively became 0.084 ppm: areas with ozone levels as high as 0.084 ppm were considered as meeting the 0.08 ppm standard, because of rounding.

EPA Administrator Johnson also outlined four principles to guide legislative changes to the Clean Air Act. They:

- must protect the public health and improve the overall well-being of our citizens;
- should allow decision-makers to consider benefits, costs, risk tradeoffs, and feasibility in making decisions about how to clean the air;
- should provide greater accountability and effective enforcement to ensure not only paper requirements but also air quality requirements are met, especially in areas with the furthest to go in meeting our standards;
- should allow the schedule for addressing NAAQS standards to be driven by the available science and the prioritization of health and environmental concerns, taking into account the multi-pollutant nature of air pollution.

Since 1980, ozone levels have dropped 21%. EPA expects improvement to continue, as a result of regulations such as the Clean Air Interstate Rule (*which will reduce emissions from power plants in the East*), and the Clean Diesel Program (*which will reduce emissions from highway, nonroad and stationary diesel engines nationwide*).

For more details on the revised standards, visit:
<http://www.epa.gov/groundlevelozone/actions.html>.



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Outdoor Wood-Fired Boilers

Winter might be over, but interest in regulations proposed for outdoor wood-fired boilers (OWB) continues to increase. Rising natural gas and heating oil prices have increased the popularity of OWB. So has the number of complaints from neighbors who live near them. In response, Ohio EPA has drafted rules (*Ohio Administrative Code 3745-115 - Outdoor Wood-Fired Boilers*) to ensure that these boilers are operated in a way that minimizes smoky particle emissions.

Comments on the draft language were due by March 21. The rules are intended to regulate emissions of particulate matter from OWB as part of Ohio's State Implementation Plan. The rules would apply to manufacturers, suppliers, distributors or others intending to sell, lease, distribute or market an OWB in the state of Ohio, as well as those who install, operate or own an OWB.

The draft rule, a new fact sheet and other information about outdoor wood boilers is now available at <http://www.epa.state.oh.us/pic/outdoorwoodfiredboilers.html>

Ohio EPA Compliance Assistance Conference

Ohio EPA will be hosting their fourth Compliance Assistance Conference: *Successfully Navigating Permits, Reporting and Inspections*, at the Crowne Plaza Columbus North on May 28, 2008.

The full-day conference is targeted to small to medium-sized businesses and others who need to know the basics about environmental compliance. Topics include:

- EPCRA, TRI and RMP Reporting
- Air Permitting Basics and Reporting
- Preparing for an Ohio EPA Inspection
- Hazardous Waste Requirements Overview
- Used Oil and SPCC Requirements
- Reporting When Things Go Wrong
- Solid Waste Basics
- Wastewater Permitting and New e-DMR Reporting
- 401/404 Requirements for Construction
- Storm Water Permitting

Additional details on the conference and on-line registration instructions are available at:

http://www.epa.state.oh.us/compliance_conference

EPA's New Multimedia Portal

EPA launched its new web multimedia portal, <http://www.epa.gov/multimedia>, in February. The site is EPA's one-stop location for environmental video, audio/podcasts, and photography. The portal also includes interactive features such as "Ask EPA" and the Deputy Administrator's blog, "Flow of the River". Another feature called "EPA in Action" follows the jobs performed by the EPA workforce and examines some of the most pressing environmental issues facing our nation today.

Viewing video is integrated into the site using flash player, and photos of events and EPA work are posted in a series of online galleries. Users may also subscribe to several podcast series or select from a number of individual podcasts featuring EPA experts and senior officials.

TRI Data Available Early

The 2006 reporting year information for the Toxics Release Inventory (TRI) database was available in February this year. This was the earliest release of the data in the 20-year history of the program. Improvements in electronic reporting and data processing are credited with the early release.

Here are some statistics on the 2006 data:

- 22,880 facilities reported 4.25 billion pounds of on-site and off-site disposal or other releases of almost 650 toxic chemicals.
- Persistent bioaccumulative toxic (PBT) chemicals accounted for 455 million pounds (11%) of reported. Of that total, lead and lead compounds accounted for 98% (446 million pounds) of PBT's.
- Total disposal or other releases for mercury and mercury compounds were 5.1 million pounds.
- Total disposal or other releases for dioxin and dioxin-like compounds were 287 pounds.
- There were 179 known or suspected carcinogens, accounting for 820 million pounds (19%) of reported on- and off-site disposal or other releases.
- Of the total for carcinogens, lead and lead compounds accounted for 54% and arsenic and arsenic compounds for 14%.
- Styrene air emissions were 45% of the total 105 million pounds of air emissions of carcinogens.
- From 2005 to 2006, the total decreased by 105 million pounds (2%).

More information about the 2006 reporting year is available at: <http://epa.gov/tri/tridata/tri06/index.htm>

EPA's Mercury Rule Needs More Work

A federal court ruled in February that the Environmental Protection Agency must rework its mercury rules for utilities. Fourteen states and environmental and public health groups sued the EPA over the rules. The U.S. Court of Appeals for the District of Columbia ruled that the EPA violated the Clean Air Act in 2005 when it exempted coal plants from the strictest emission controls for mercury and other toxic substances like arsenic, lead and nickel. The EPA's "Clean Air Mercury Rule" would have created a "cap-and-trade" program to allow utilities to swap rights to emit mercury to comply with overall limits that would reduce nationwide emissions by 70 percent by 2018.

The court ruling means that large coal-burning utilities will have to install mercury-reduction equipment at more of their power plants rather than rely on a trading program.

It may be years before EPA can enact new rules on mercury. In the meantime, regulating mercury emissions will likely be left to states, which in many cases have set their own limits on utilities.

The nation's 1,100 coal-burning units emit about 48 tons of mercury each year, the largest unregulated U.S. source. The EPA rule vacated by the court would have set the cap at 38 tons per year by 2010 and 15 tons per year in 2018.

A copy of the decision is available at <http://pacer.cadc.uscourts.gov/docs/common/opinions/200802/05-1097a.pdf>

Approximately 80% of our air pollution stems from hydrocarbons released by vegetation, so let's not go overboard in setting and enforcing tough emission standards from man-made sources.

*~ Ronald Reagan,
40th United States President*

EPA FY 2009 Budget Released

EPA Administrator Stephen L. Johnson released his agency's \$7.14 billion fiscal year 2009 budget in February.

Some key line items include:

- An additional \$14 million to meet the increased permitting and environmental review responsibilities that have come with the upsurge in proposed energy projects in response to higher energy prices.
- \$49.2 million for Clean Diesel grants.
- An additional \$32 million above 2008 for a total investment of \$170 million for Homeland Security to expand our emergency teams' capability to address more than one simultaneous event, and improve our water infrastructure security.
- The largest enforcement budget ever - an increase of \$9 million for a total budget of \$563 million.
- For water programs, the FY 2009 budget requests \$555.5 million for clean water grants and \$842.2 million for drinking water grants.
- For air programs: \$186 million for state and local air grants; \$98 million for EPA's climate change programs; \$44 million for Energy Star programs; \$5 million for the Asia Pacific Partnership to support international efforts to reduce greenhouse gas emissions; and \$4.4 million for Methane to Markets to promote methane recovery and use at landfills, coal mines and natural gas facilities.
- An increase of \$10.2 million for Superfund, for a total of \$1,264 million.

Targeted research proposals include:

- An additional \$4.5 million for a total of \$14.9 million for nanotechnology research to better understand the processes that govern the environmental fate of nano-materials and to capture the data needed for accurate nano-material assessments;
- \$16 million for global climate change research; and
- \$9 million for integrated risk information systems.

More information on the President's FY 2009 budget request for EPA: www.epa.gov/ocfo/budget/index.htm

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Our Mission Statement:

To be a high quality provider in the Environmental Services Industry that is focused on growth and on diversification through new products and acquisitions.

Our Core Values:

Customer Satisfaction
Rigorous Attention to Detail
Continuous Improvement
Employee Empowerment and Accountability
Flexibility

Upcoming Events...

• **Manufacturer's Education Council's Ohio Permitting Conference** Thursday, July 17, 2008, Crowne Plaza Columbus North Hotel, Go to www.mecseminars.com for more information. Please stop by to say hello!

• **A&WMA Northern Ohio Chapter's Spring Technical Conference**
Thursday, May 8, 2008, Trinity Cathedral, Cleveland.

Go to http://www.nocawma.org/documents/spring08reg_form.pdf for registration information.

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Excellence in Emission Testing

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