

AIR/COMPLIANCE NEWS UPDATE



Final Rule on the Implementation New Source Review Provisions for Particulate Matter Less than 2.5 Micrometers

Sheri L. Guerrieri

The USEPA has issued a final rule for the implementation of the New Source Review (NSR) program for particulate matter less than 2.5 micrometers (PM_{2.5}). The requirements were published in the Federal Register on May 8, 2008. This final NSR rule complements both the USEPA's April 25, 2007, final implementation rule for the non-NSR (SIP related) provisions of PM_{2.5} NAAQS and a rule proposed on September 21, 2007 to facilitate implementation of a Prevention of Significant Deterioration (PSD) program in areas in attainment for PM_{2.5}.

This rule requires NSR permits to address direct PM_{2.5} emissions as well as secondary formation of PM_{2.5}. Secondary formation from SO₂ must be considered. NO_x emissions can be emitted if it is shown that they are not a significant contributor to PM_{2.5}. **VOC and ammonia** are not regulated unless there is a demonstration that VOC emissions are a significant contributor to PM_{2.5} formation in that area. EPA has adopted a transition period before requiring accountability for the gases that are emitted as gases, but condense to form particles, or the "condensibles." One of the difficulties is that the measurement of condensibles has been highly unreliable. EPA is also currently working on improving USEPA Method 202, the Method which has been used to measure condensibles. This rule also sets the **significant emission rates** (used to determine NSR applicability) for existing facilities that emit direct PM_{2.5} and precursor pollutants. The rule **allows interpollutant trading** under the PM_{2.5} nonattainment NSR program on a regional or statewide basis, but precludes trading on a permit-by-permit basis. The EPA has developed **acceptable trading ratios** which specify the amount of each pollutant which may be traded for another. States with EPA approved PSD programs and those

with PM_{2.5} nonattainment areas have up to three years from the publication of this final rule to submit revised SIPs incorporating these NSR requirements. States with EPA approved PSD programs should continue to use the existing interim approach using PM₁₀ as a surrogate for PM_{2.5} until their SIPs are revised and adopted.



Visit our website at www.air-comp.com for more details.

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Federal Court Decision Strikes Down EPA's Mercury Rule; Pennsylvania Rule Remains Valid

Nancy M. Hirko/Jill W. Merrill

The Clean Air Mercury Rule (CAMR) was vacated by a Federal Court on February 8, 2008, leaving many power plants with an uncertain future. Many plants have expensive projects underway without any clear federal program in place. The states now have the lead in implementing controls. Among the issues that power plants face after the ruling are the following:



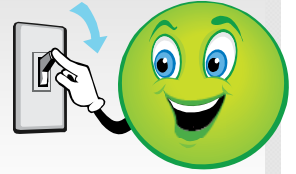
- Most utilities have already purchased mercury monitoring systems in anticipation of reporting requirements starting next year.
- The ruling reinstates coal-fired power plants as toxic emitters. Since most coal-fired power plants exceed the toxic thresholds for HCl, most will need to install Best Available Control Technology (BACT).
- Particulate air toxics may now have to be monitored in one form or another. CAMR disregarded particulate mercury as inconsequential. This dismissal may no longer be possible and could result in frequent stack testing.
- Controls may now need to be considered for other toxic metals like arsenic, cadmium, chromium, lead, and selenium.
- Going forward with State Programs without Federal Regulations.

Pennsylvania's final mercury rule was published in the Pa. Bulletin on Saturday, February 17, 2008. Pennsylvania's rule does not have a cap-and-trade component, and will result in a 90% cut in mercury emissions from all PA coal-fired power plants by 2015.

EPA Calculator Puts Greenhouse Gas Savings in Everyday Terms

Can you picture what it means to reduce carbon dioxide (CO₂) emissions by 1 million metric tons? News stories are packed with measurements of greenhouse gas reductions, but it can be difficult to understand them until now. EPA's new Greenhouse Gas Calculator helps you turn greenhouse gas savings into more easily understood everyday terms.

The calculator converts greenhouse gas-related savings estimates, typically presented in "million metric tons of carbon dioxide equivalents," into familiar terms such as the greenhouse gas emissions that would result from:



- Driving a particular number of cars for a year,
- Using a particular amount of gasoline or barrels of oil,
- Using a particular number of tanker trucks' worth of gasoline,
- Providing energy to a particular number of homes for a year,
- Growing trees across a particular number of acres for a year,
- Recycling a particular quantity of waste instead of sending it to the landfill, or
- Generating electricity from a particular number of coal fired power plants for a year.

Users can enter savings in emissions, electricity consumption, gallons of gasoline, or number of vehicles into the calculator and determine up to 13 different ways to express the magnitude of the savings. The calculator uses the latest emission factors, approaches and statistics available through 2007.

As an example, if a typical household switched all its incandescent light bulbs to Energy Star qualified compact fluorescent light bulbs, it would save about 75 percent of the lighting electricity use, or about 1,463 kWh a year. After five years, these energy savings are equivalent to:

- Saving about 10,289 pounds of CO₂ emissions,
- Conserving 530 gallons of gasoline,
- Saving 11 barrels of oil,
- Planting 120 tree seedlings, or
- Recycling 1.6 tons of waste.

[Information on the calculator:](http://epa.gov/cleanenergy/energy-resources/calculator.html) epa.gov/cleanenergy/energy-resources/calculator.html

USEPA Method 202 Improvement Initiative

USEPA is undergoing a review of Method 202 (Method for condensable particulate matter). Interested parties have until June 27, 2008 to send comments to Ron Meyers at:

Myers.ron@epa.gov
Tel. 919-541-5407

Proposed Area Source NESHAP for Metal Fabrication and Finishing

Mark S. Schooley

On April 3, 2008, EPA proposed national emission standards for control of hazardous air pollutants (HAP) for nine metal fabrication and finishing area source categories (see <http://www.epa.gov/EPA-AIR/2008/April/Day-03/>). This rule proposes emission standards in the form of management practices and equipment standards for new and existing operations of dry abrasive blasting, machining, dry grinding and dry polishing with machines, spray painting and other spray coating, and welding operations. These proposed standards reflect EPA's determination regarding the generally achievable control technology (GACT) and/or management practices for the nine area source categories. For more information, visit www.air-comp.com/articles.

Area Source Electric Arc Furnace and Steelmaking Facilities Nancy M. Hirko

On December 28, 2007, the USEPA finalized air toxics standards (Subpart YYYYY) for area sources for electric arc furnaces (EAFs) in steel manufacturing. (72 FR 74088) An area source is one that emits less than 10 tons per year of a single air toxic or less than 25 tons per year of a combination of air toxics. The proposed rule would reduce mercury emission by requiring that EAF steelmakers only buy motor vehicle scrap from providers that participate in an EPA-approved program for the removal of mercury switches. In addition, facilities that produce less than 150,000 tons per year of stainless or specialty steel would need to comply with an emission limit of 0.8 lbs PM/ton steel. The PM limit for other facilities would be 0.0052 gr/dscf. A 6% opacity limit would apply to fugitive emissions from EAFs. The compliance date for existing sources is June 30, 2008.

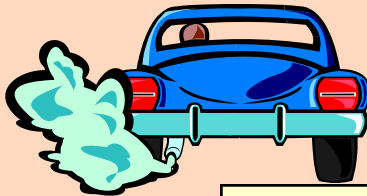
**EPA Publishes Proposed Rule Impacting the Emission Standards for Hazardous Air Pollutants for Plating and Polishing Operations** Mark S. Schooley

EPA is proposing national emission standards for control of hazardous air pollutants (HAP) for the plating and polishing area source category. This rule proposes emission standards in the form of management practices for new and existing tanks, thermal spraying equipment, and mechanical polishing equipment in certain plating and polishing processes. These proposed standards reflect EPA's determination regarding the generally achievable control technology (GACT) and/or management practices for the area source category. The regulations would be published in their final form at 40 CFR 63. This proposed rule was published in the March 14 Federal Register at [73 FR 14125](http://www.epa.gov/fedrgstr/EPA-TOX/2008/March/Day-14/t4974.htm) (<http://www.epa.gov/fedrgstr/EPA-TOX/2008/March/Day-14/t4974.htm>).

CLEAN FUELS PROGRAMS ARE SUCCESSFUL

EPA's clean fuels programs have exceeded expectations in reducing ozone pollutants and air toxics. A new report, Fuel Trends Report: Gasoline 1995-2005 (<http://www.epa.gov/otaq/regs/fuels/rfg/properf/rfgperf.htm>), finds emission reductions often significantly greater than greater than regulatory requirements. The data, which provide a view of recent gasoline property trends, are mainly from EPA's reformulated gasoline (RFG) and anti-dumping programs. Highlights of the report include:

Gasoline sulfur decreases-Average annual sulfur content in all gasoline dropped from about 300 parts per million (ppm) in 1997 to about 90 ppm in 2005. Conventional gasoline NOx and toxics emissions decreased-Between 1998 and 2005, the summer NOx emissions of conventional gasoline were reduced by 5.7%, while summer exhaust toxics were reduced by 4.7%. Ethanol use in RFG increased and MTBE use decreased-In the summer of 1996, about 11% of the RFG sold contained ethanol while virtually all the remainder contained MTBE. By the summer of 2005, the ethanol share increased to about 53%, with corresponding decreases in MTBE.



OHIO EPA to Combine PTI and PTO for Non-Title V Facilities

Mark S. Schooley

Currently, Ohio EPA (OEPA) has a two-step permitting process for non-major facilities. A Permit-to-Install (PTI) is required prior to construction of new and modified sources. After the source has been installed, the facility is required to apply for and obtain a Permit-to-Operate (PTO). This is being changed to a combined Permit-to-Install and Operate (PTIO) Program. OEPA expects to start issuing PTIO's after June 30, 2008. Holders of PTIO's will have to submit an annual Permit Evaluation Report (PER) to OEPA. This is essentially a compliance certification report, although it won't be as detailed as the annual certifications required of Title V sources. The new PTIO and PER forms are available now for preview at:

www.epa.state.oh.us/dapc/permits/ptio.html.

Greenhouse Gas Reporting to be Mandatory Next Year

A spending bill recently signed into law by President Bush includes a provision requiring EPA to establish a mandatory greenhouse gas (GHG) reporting program. The law directs the EPA to publish a draft GHG reporting regulation within nine (9) months and final regulations within 18 months, which would be June 2009. The law, which could cover all U.S. industries, does not appear to pre-empt GHG reporting standards that are already being adopted by many states. EPA will have discretion in determining program source categories, reporting thresholds, and frequencies.

NSPS for Stationary Spark Ignition Internal Combustion Engines and NESHAP for Reciprocating Internal Combustion Engines Finalized

Nancy M. Hirko

On January 18, 2008, EPA finalized its New Source Performance Standards (NSPS) for Spark Ignition (SI) Internal Combustion Engines (ICE) and the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE). [73 FR 3567] The NSPS applies to all new, modified and reconstructed SI ICE regardless of size and fuel used. The new rule is promulgated at 40 CFR Part 60, Subpart JJJJ. The NSPS will require the applicable sources to control emissions to the level achievable by best demonstrated technology (BDT). Note that final NSPS for compression ignition (CI) engines were published on July 11, 2006. [71 FR 39154] The emission limitations are grouped according to engine size, fuel fired and whether the engine is categorized as an emergency unit.



Updated Ozone Map Reflects Improved Air Quality in PA Areas

EPA has updated its ozone maintenance area map Web page to reflect air quality improvement in areas formerly designated as non-attainment or not meeting the federal health standards for ground level ozone, or smog. Five areas in Pennsylvania including Reading, Erie, State College, Youngstown/Warren/Sharon and Scranton/Wilkes-Barre, have now been redesignated as having attained the level set to protect public health, and comply with Clean Air Act requirements. For more information, go to <http://www.epa.gov/reg3artd/airquality/ozone8hrmaintareas.htm>.



WELCOME . . .

Thomas Payne, Frank Barton, Chris Bartley, Kevin Aubele, and Mike Belfoure to ACCI's growing staff of air quality experts.



Qualified Stack Testing Individuals (QSTI)



The following ACCI staff have passed the QSTI exam offered by the Source Evaluation Society (SES): Jaimes Contreras; William Cowell; Todd Haas; Michael Matvey; William Ondrizek; Joshua Varner; Eric White; and Richard Williams.

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- ◆ Risk Management Plan Development
- ◆ Emission Control and Monitoring Assistance
- ◆ NESHAP Planning (SSM Plans)