

ENVIRONMENTAL SYNOPSIS

The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman



Back in August, I wrote about the Legislative Forestry Task Force's (task force) action in regard to proposed U.S. Environmental Protection Agency (EPA) regulations that would impose strict new limits on emissions from industrial, commercial and institutional boilers and process heaters – including biomass fired boilers and heaters. The proposal is known as the Boiler Maximum Achievable Control Technology Rule or Boiler MACT Rule.

At the behest of a majority of its members, the task force, after hearing testimony from several industry members from Pennsylvania, including an environmental award-winning Pennsylvania paper mill, a national custom cabinetry manufacturer, Penn State University and an environmental consultant, prepared and offered comments to EPA seeking changes in the regulations, because of fears of massive job losses and compliance costs in the billions of dollars.

Joint Legislative Air and Water Pollution Control and Conservation Committee Executive Director Craig Brooks writes about the Boiler MACT Rule and other proposed emissions regulations from the environmental perspective in this month's "Notes From the Director" on page two. I would like to write about the proposed regulations from the perspective of the potential economic impact they could have on the forest products industry.

The American Forest and Paper Association (AF&PA) commissioned a study focusing on the nationwide economic impact of the Boiler MACT Rule, and the other rules proposed by EPA. The study was performed by Fisher International, Inc., a consulting firm specializing in the economics of paper mills. The compliance cost data used by Fisher was prepared by URS, a well-known engineering consulting firm with expertise in pollution control costs and operations as well as the pulp and paper industry.

The general conclusion of Fisher's study was that the proposed rules would have "severe impacts on the pulp and paper industry."

More specifically, the study estimated that the Boiler MACT Rule would result in the loss of 16,888 jobs in pulp and paper manufacturing mills alone, and 71,774 jobs lost if one took into consideration the supply chain to the mills and jobs depending on the mills in surrounding communities. Keep in mind that these job numbers do not

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NOTES FROM THE DIRECTOR

CRAIG D. BROOKS, EXECUTIVE DIRECTOR



The Environmental Protection Agency's (EPA) proposed emissions standards for industrial, commercial and institutional boilers are unachievable, according to arguments industry groups raised in comments on the proposed rule.

Industry groups and some states have raised concerns about EPA's proposal, including how the agency calculated the emissions limit, the need for more subcategories for the boiler standards, and how EPA has defined violations as part of the proposed rule. In addition, more than 100 members of Congress have expressed concerns about the possible economic impact of the rule. The comment period on the proposed rules closed August 23, 2010.

In June 2010, EPA proposed two separate rules to set national emissions standards for hazardous air pollutants for industrial, commercial and institutional boilers

and process heaters – one for major sources and one for smaller area sources. The proposed rules would require operators to control emissions of toxic pollutants such as mercury, hydrogen chloride, particulate matter, carbon monoxide, and dioxins and furans, with emissions standards based on the boiler type and size. EPA is subject to a court-ordered deadline to issue final boiler rules by December 2010.

Various industry groups have disputed how EPA determined the emissions standards for boilers and process heaters, arguing that they resulted in unobtainable standards. EPA's boiler proposal sets the emissions limits for each hazardous air pollutant individually rather than evaluating the facilities' emissions as a whole. The case-by-case emissions limits resulted in standards that no one boiler or process heater will be able to achieve, according to the American Boiler Manufacturers Association (ABMA). Industry representatives also stated that the carbon monoxide emissions control requirements of the proposal could interfere with a boilers' ability to meet requirements to control emissions of nitrogen oxides.

The Virginia Department of Environmental Quality raised similar concerns, arguing that EPA's proposed standards could actually lead to increased nitrogen oxides emissions. Like many industry groups, Virginia also questioned whether EPA's proposed standards could be achieved by any existing boilers and process heaters.

For example, the boiler that has the lowest mercury emissions may not be able to meet the standards for any of the other regulated pollutants because those limits were set based on performances of one or more different units. The proposal requires that the standards be "achieved in practice" by the best-performing units in any source category.

The ABMA has asked EPA to consider additional emissions data collected by boiler and burner manufacturers during their own emissions testing. Specifically,

emission limits that are identified by EPA as "achieved in practice" should not be inconsistent with the most up-to-date equipment emission guarantees offered by equipment manufacturers.

Several industry groups, including the Brick Industry Association, American Electric Power, the Aluminum Association and the Council of Industrial Boiler Owners suggested that EPA give boiler and process heaters the option of either meeting a numeric emission limit or reducing emissions by a required percentage, something which EPA has previously done for other emissions rules.

EPA proposed the boiler standards as part of a larger package of regulations that would also set emissions limits for incinerators and establish a rule to define which materials should be considered fuels and those that should be considered waste.

Boilers are regulated by Section 112 of the Clean Air Act while incinerators are subject to standards under Section 129.

Concerns about EPA's proposed standards are based on how EPA calculated emissions limits, the need for more boiler standard subcategories, and EPA's definition of violations

RESEARCH BRIEFS

Each month, the committee's staff researches and prepares a number of "briefs" on several topics relevant to the Joint Conservation Committee's mission. Very often, these briefs include references to reports and further research on the topics so that readers may pursue issues on their own.

Will a Pay-As-You-Go Mileage Tax Replace the Gas Tax?

-- Tony M. Guerrieri, Research Analyst

The United States' crumbling infrastructure and underfunded transportation system will affect its place in the global economy, according to a bipartisan blue-ribbon panel's report. The report, *"Well Within Reach: America's New Transportation Agenda"*, concludes that the U. S. cannot compete successfully in the 21st century with a 20th century transportation infrastructure.

The report states, for example, that U.S. investment in terms of transportation infrastructure is so far behind that of China, Russia and Europe, that it will erode the nation's social and economic foundations in the long run. To address some of these problems, the report estimated that the nation would need an additional \$134 billion to \$262 billion per year through 2035 to rebuild roads and rail and air transportation systems.

From a long-term perspective, the report argues that the nation needs to come up with a steady revenue stream to fund its failing systems. Though an increase in the gas tax works as a short-term solution, the report recommends a new highway use fee based on vehicle-miles traveled (VMT) to achieve long-term sustainability.

"A fee of just one penny per mile would equal the revenue currently collected by the fuel tax; a fee of two cents per mile would generate the revenue necessary to support an appropriate level of investment over the long term." -- "Well Within Reach: America's New Transportation Agenda"

According to the report, adopting a funding approach based on VMT would restore the original intent of the federal Highway Trust Fund: that users fund the transportation system in proportion to their use of it.

Oregon already tested a VMT system in 2006-07, using 299 volunteer motorists. The system worked by means of an onboard "mileage counter," which then notified participating gas stations how far the vehicle had gone.

While the owner filled up, the gas tax was deducted from the gas bill, and the "mileage tax" was added. According to the report, more than 90 percent of the participants said they would agree to use it in lieu of the gas tax if the program were implemented statewide, and the state's governor is now seeking \$10 million to expand the program.

The report also advocated the adoption of high-speed rail to ease congestion on the nation's roads and airways, public private partnerships to meet transportation goals, and the need for local and state governments to make decisions about their own transportation needs.

The report highlights 10 proposals on how to improve America's roads and bridges. They include:

1. Congress must address the immediate crisis in transportation funding.
2. Future funding mechanisms should not depend primarily on fossil fuel consumption. The gas tax in years ahead is expected to continue to erode. The VMT fee system, based simply on distance, is the centerpiece recommendation of the report.
3. Future stimulus spending should be directed to those transportation projects that will deliver the greatest returns in terms of jobs, economic growth and future U.S. competitiveness.
4. Enhance the effectiveness of states, localities, and metropolitan planning organizations and clarify their roles in transportation decision-making processes.
5. Adopt a capital budget. The federal government should adopt accounting methods that recognize expenditures on transportation infrastructure as investments (rather than consumption) and take into account future returns on those investments.
6. Adopt an integrated approach to transportation planning that includes freight and goods movement and stresses intermodal connectivity.
7. Find more effective ways of reducing urban congestion.
8. Encourage public-private partnerships while also improving oversight of them.
9. Deliver transportation investments on time by reforming project planning, review, and permitting processes to speed actual implementation.
10. Build a foundation for informed policy with better and more timely data to measure progress toward defined

goals and objectives and to improve the performance of the nation's transportation systems.

The report acknowledges that convincing the American public of the need to act, and act promptly, will not be easy.

The report is based on the David R. Goode National Transportation Policy Conference, held at the University of Virginia's Miller Center of Public Affairs and attended by more than 80 experts representing a wide array of transportation interests.

The 92-page report is available at: http://www.infrastructureusa.org/wp-content/uploads/2010/10/conf_2009_transportation.pdf.

Wastewater Utilities Say Some Blending Should Be Allowed During Heavy Rains

-- Craig D. Brooks, Executive Director

The leading clean water industry association said in recent comments to the Environmental Protection Agency (EPA) that wastewater treatment plants should be allowed to "blend" partially treated and fully treated wastewater when necessary during heavy rains under any new rules governing sanitary sewer systems.

According to the National Association of Clean Water Agencies (NACWA) the use of blending is absolutely necessary for many publically owned treatment works (POTW) to treat wet weather flows and still meet effluent limitations. NACWA has suggested that permitting agencies should be allowed to incorporate blending as an alternative in National Pollutant Discharge Elimination System (NPDES) permits under appropriate conditions and circumstances as long as the treatment plant uses appropriate practices for managing flow and treatment capacity.

The utility association was among a number of groups commenting to EPA concerning a proposal to modify NPDES regulations as they apply to municipal sanitary sewer collection systems. EPA also wants to resolve long-standing issues surrounding a 2005 proposed draft "peak wet weather flow" policy that was never finalized. EPA said in the June 2010 Federal Register that it was considering whether to adopt this policy, revise it, or address the peak wet weather flow issue as part of an approach for sanitary sewer overflows (SSO's) to allow a holistic and integrated approach to reducing SSO's while at the same time addressing peak flows at POTW plants.

Sanitary sewer systems are designed to carry sewage only, while combined sewer systems carry both sewage and stormwater. EPA issued a combined sewer overflow policy in 1994, but it has not issued a final policy on sanitary sewer overflows.

During wet weather conditions, NACWA says treatment plants must treat flow volumes many times greater than dry weather flows. Collection systems and plants were not designed to store and treat this excess flow and it would be both inefficient and not technologically feasible to redesign these facilities to accommodate all wet weather conditions. As long as a POTW is meeting its permit limits, EPA should not be concerned with the treatment processes used at the plant or involved in monitoring water quality within the plant. As EPA considered new SSO rules, NACWA suggested that all options regarding peak flows must be on the table including final SSO regulations that authorize peak flow treatment under the current "bypass" regulation.

As mentioned earlier, EPA's 2005 proposed policy attempted to clarify its interpretation that the existing bypass provision in NPDES regulations applies to peak wet weather diversions at POTW's, which recombine with flows from secondary treatment prior to discharge. EPA's rule prohibits bypasses except where necessary for essential maintenance to assure efficient operation. All other bypasses are subject to enforcement action unless there are no feasible alternatives or to prevent loss of life, personal injury, or severe property damage.

Support for blending is part of comments offered on a proposal to modify NPDES regulations as they apply to municipal sanitary sewer collection systems

The draft policy, which NACWA helped develop, said blending was considered a bypass and therefore subject to the original rule's requirements that a bypass only be approved if there were no feasible alternatives to peak wet weather flow diversions around secondary treatment. Secondary treatment typically uses biological methods, including bacteria, to treat the wastewater after it has gone through primary treatment. The draft policy would have required sanitary sewer treatment plants to provide full secondary treatment to wastewater, including during peak wet weather flows. NACWA has commented that the 2005 draft policy was developed at a time when collection system condition standards were lacking. A solution to peak flows was attempted, however, the underlying collection system was not part of that solution. The issue of peak flow management at the treatment plant is directly tied to the management of the collection system, and utilities must be able to develop a system wide program for the wet weather collection, treatment and management that meets Clean Water Act mandates and the needs of their communities, NACWA said.

Peak flows at treatment plants should be handled in a cost-effective manner that allows for discharge of peak flows from the wastewater treatment facility if the effluent meets water quality standards. NACWA has urged EPA not to pursue any policies or regulations that create disincentives to installing new types of filtration technology that can provide high levels of treatment.

More information on municipal sewer and satellite collection systems may be found at <http://regulations.gov> under docket ID No. EPA-HQ-OW-2010-0464.

Report Recommends More Spending on Clean Energy Research and Development

-- Tony M. Guerrieri, Research Analyst

In the absence of a national long-term energy strategy, a joint report from three major U.S. think tanks: the American Enterprise Institute, the Brookings Institution and the Breakthrough Institute, urges the federal government to invest billions of dollars a year to bring about a clean energy revolution that would boost the nation's economic competitiveness and protect the environment.

The report, *"Post-Partisan Power: How A Limited And Direct Approach To Energy Innovation Can Deliver Clean, Cheap Energy, Economic Productivity And National Prosperity"*, calls for revamping America's energy innovation system by driving energy technology with strategic federal investment in clean energy research and development, much like what is done in the medical and military fields, both areas where America has been a world leader.

The report proposes a four-part limited, direct energy framework

The report points to the nation's long history of support for innovation. The health and defense sectors show how America can spend innovation money effectively. The federal government invests \$30 billion per year in health research and development through the National Institutes of Health, and \$80 billion per year in military research and development.

The federal government, however, spends less than \$5 billion a year on clean energy innovation. Similar commitment should be made to advanced energy technologies, the report concludes.

The report proposes increasing federal spending on clean energy innovation up to as much as \$25 billion a year. The proposal would also toughen rules for such money, by proposing that recipients continue getting it only

if they were reducing the cost of clean energy.

The report is based on a four-part energy framework that is both limited and direct.

It is limited in that it is focused not on organizing the nation's entire energy economy but rather on specific strategies to drive down the real cost of clean energy technologies.

It is direct in that rather than simply subsidizing existing technologies in the hope that as they ramp up their cost will decline, or providing tax credits to private firms for research, the federal government would directly drive innovation through research, development, and procurement.

The report lists the following energy framework:

- **Invest in Energy Science and Education.** The U.S. Department of Energy's (DOE) Office of Science should have its budget doubled to address scientific obstacles to energy technologies, and energy education should be earmarked for at least \$500 million per year.
- **Overhaul the Energy Innovation System.** The report calls for investing up to \$5 billion annually for a national network of decentralized energy innovation institutes bringing public and private researchers together with investors from the start. It also recommends a greater role for the DOE's new Advanced Research Projects Agency-Energy, or ARPA-E, which focuses exclusively on high-risk, high-payoff technologies. The report recommends bringing ARPA-E to scale by providing \$1.5 billion annually.
- **Reform Energy Subsidies and Use Military Procurement and Competitive Deployment Incentives.** Federal subsidies should be overhauled to favor products that consistently fall in price. "Today, firms get subsidies that reward production of more of the same product, not innovation that results in lower prices," the report says, calling for reforms for fossil fuel and clean technologies alike. It calls on the federal government to provide up to \$5 billion per year to help the U.S. Department of Defense test, demonstrate and purchase energy technologies.
- **Internalize the Cost of Energy Modernization and Ensure Investments Do Not Add to the National Deficit.** The report proposes a range of financing options, including phasing out "unproductive energy subsidies," increasing fees on imported oil, imposing a "small surcharge" on electricity sales, and imposing a very small carbon tax on fuel to raise money.

The 36-page report can be downloaded at: <http://thebreakthrough.org/blog/Post-Partisan%20Power.pdf>.

Large Investments Needed To Meet Federal Biofuels Production Goals

-- Craig D. Brooks, Executive Director

Expanding regional resources and infrastructure for the production of biofuels is key to reaching congressionally mandated biofuels production goals, according to a report released by the U.S. Department of Agriculture (USDA). The report, *"A USDA Roadmap to Meeting Biofuels Goals of the Renewable Fuels Standard by 2022"*, outlines the regional capacity for growing and processing the crops that can be used to produce ethanol or biodiesel. The report calls for a large increase in biofuels production plants and for private investments in the infrastructure necessary to transport the fuel and make it available for consumers.

Although the report suggests that substantial investments are needed, it also concluded the renewable fuels standard mandated by Congress in the Energy Independence and Security Act is attainable. The standard would require the U.S. transportation fuel supply to include 36 billion gallons of ethanol or other renewable fuels by 2022, of which 21 billion gallons must be derived from cellulosic sources or biomass, such as switchgrass or crop residues. According to the report, the U. S. will soon have the installed capacity to produce up to the 15 billion gallons of corn starch ethanol that is allowed by the renewable fuels standard. Additionally, the U.S. biofuels industry is on track to produce 1 billion gallons of biodiesel by 2022.

Different regions will have different roles to play in producing the remaining 20 billion gallons required by the fuel standard. The Southeast region and Hawaii would produce about 50 percent of the additional advanced biofuels needed by 2022, followed by the Central East region, producing about 43 percent, according to the report. The report projects that a demand for biofuels and growing interest in the industry will spur production of new processing plants. The 12-state Southeast region currently has 17 producing ethanol refineries, with several idle or

under construction. The region also has 40 producing biodiesel refineries with an additional 25 that are idle.

For the region to produce the projected 50 percent of the country's biodiesel called for in the report, it would need a total of 263 refineries, each producing an average of 40 billion gallons of fuel annually, requiring an \$83.3 billion cumulative investment.

The Central East region, which includes Pennsylvania and 15 other states, currently produces 12 billion gallons of conventional ethanol and 0.5 billion gallons of biodiesel annually. The region has 170 producing ethanol refineries, 63 producing biodiesel refineries, several under construction, and 14 biodiesel refineries that are idle.

Expanding regional resources and infrastructure in order to produce biofuels is key to reaching mandated production goals

The report suggests that a cumulative investment of \$72 billion would be needed to build 226 biorefineries in the region, each with a capacity of 40 million gallons annually.

Due to crop availability, the Northeast, Northwest and Western regions would produce a significantly smaller portion of the additional fuel. The report estimates that \$11.84 billion of cumulative investments will be needed to build 38 additional refineries in the Northeast and Northwest, which together would produce 6.6 percent of the 20 billion gallons of advanced biofuels. The report predicts that the Western region will produce less than 0.3 percent.

The report recognizes that the path from production to actual consumption presents challenges that will need to be anticipated and addressed. Those challenges include increasing the maximum percentage of ethanol blended with traditional fuel, increasing the number of fuel pumps that allow consumers to purchase biofuel blends, and increasing the number of trains available to transport biofuels.

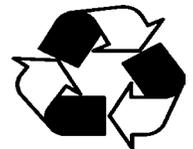
The USDA report is available at: http://www.usda.gov/documents/USDA_Biofuels_Report_6232010.pdf.

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ON THE HORIZON...

A LOOK AT UPCOMING EVENTS

✓ Thursday, December 16, 2010, 10:00 a.m., Celebration Hall, 2280 Commercial Boulevard, State College, PA
– Legislative Forestry Task Force Meeting.

Also, check the Committee website at <http://jcc.legis.state.pa.us>
for events that may be added to the schedule.

A REVIEW OF SOME
MEMORABLE COMMITTEE
EVENTS

COMMITTEE CHRONICLES...

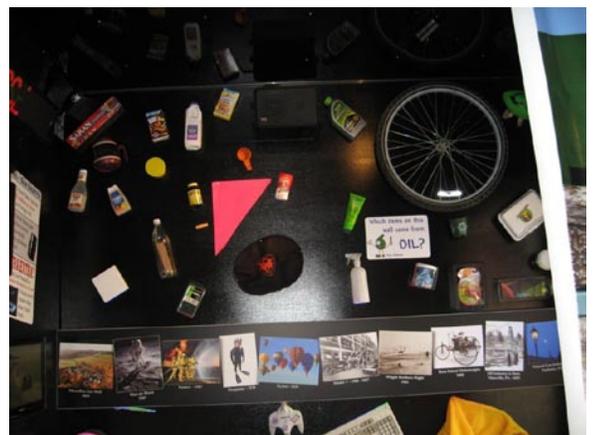
On October 12, the Drake Well Museum Mobile Energy Education Training Unit (MEET U) made a special visit to the Capitol, as pictured at right.

The unit, a 44-foot long, 13-foot high truck tractor and trailer attractively wrapped and outfitted with a number of exhibits about Pennsylvania's historic oil and gas industry, was staffed by museum personnel and open for the public to visit, as many did (photo at left).



Pennsylvania was the birthplace of the oil industry when Colonel Edwin Drake drilled the first successful commercial oil well in Venango County near Titusville in 1859. The Drake Well Museum commemorates that event and its impact on the

world, and is a popular spot for Pennsylvanians and tourists to visit. The museum has now implemented this "mobile museum" in order to improve energy education around the state. *The interior offers a variety of exhibits about the energy industry, an example of which is seen at right.*



include job losses in the wood manufacturing sector of the forest products industry.

Further, if the other proposed air regulations being proposed are taken into consideration, job losses in pulp and paper manufacturing are estimated by Fisher's study at 43,666. Job losses including supply chain and surrounding community jobs would reach 185,581.

The study estimates that the Boiler MACT Rule would cause 30 mills to close. AF&PA further estimates that the loss of jobs and closure of mills (using the 71,774 figure) would mean a \$3.3 billion reduction in wages and the loss of approximately \$1.1 billion in state, local and federal taxes.

The Fisher study also went on to say that the entire package of proposed air regulations could place 92 pulp and paper mills in jeopardy of closing. The job loss figure of 185,581 would mean \$8.5 billion in reduced wages and about \$2.9 billion in lost state, local and federal taxes.

In addition, the Fisher study concluded that the proposed regulations taken as a whole would result in almost \$12 billion in new capital costs and an estimated \$2.8 billion in annualized costs (including capital and operating costs). The Boiler MACT Rule alone is estimated by URS to impose \$4.6 billion in new capital costs and \$560 million in operating costs. Total forest products industry capital costs are estimated to be at least \$17 billion. All of that is indeed a "severe" burden to bear for an already struggling industry.

**The general conclusion of Fisher's study
was that the proposed rules would have
"severe impacts on the pulp and paper industry."**

Keep in mind that according to AF&PA, the nation's economic downturn and slump in the housing industry has already caused a 30 percent contraction in the forest product industry's employment base. That translates to the loss of some 380,000 jobs.

The forest products industry is a major employer in Pennsylvania and would certainly be hard hit, as was testified to by those appearing before the task force. But, keep in mind that the proposed Boiler MACT Rule would also impact universities, food product processors, furniture makers, and a wide variety of manufacturers, such as the chemical, metalworking, auto, plastic and refining industries.

The severe impact presented by the Fisher study is why the task force's comments it submitted to EPA urged reasonable, realistic, science-based standards, not irresponsible, industry-killing standards. Similarly, House Resolution 879, unanimously adopted by the Pennsylvania House on September 27, 2010, urged EPA to "...incorporate sustainable approaches that protect the environment and public health while fostering economic recovery and jobs within the bounds of the law."

As Executive Director Brooks notes in his article, final rules from EPA are to be issued by December 2010. It is the hope that EPA will have taken to heart the conclusions put forth by the AF&PA study, and considered seriously the comments offered by the task force and found in HR 879.

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