July 2005
Vol. 6, No. 7
Published Monthly

ENVIRONMENTAL SYNOPSIS

The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman

The Joint Committee recently held a public hearing on the availability of coal – or lack thereof – from the anthracite fields of Pennsylvania. The committee held the hearing because despite having an estimated 12 billion tons of "hard" coal reserves in the ground, many consumers could not obtain coal to heat their homes during the last heating season, and the committee wanted to know why.

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Witnesses gave us several reasons for the coal shortage and some interesting information on the world coal markets. Perhaps most intriguing was the supposition put forward by anthracite coal producer Daniel Blaschak, treasurer of the Blaschak Coal Corporation and chairman of the Pennsylvania Anthracite Council. Blaschak stated the industry was hit with a "perfect storm" – a multitude of factors that caused big problems when they serendipitously but seemingly inevitably came together.

Among the storm clouds was the glut of cheap Chinese coal and coke imports from 2000-2003, which put many Pennsylvania anthracite coal producers out of business. But those imports dried up when 2004's rapid industrial gains in China, India and other emerging nations caused a shortage of carbon and other natural resources. The result was that China kept its coal and coke products for domestic use rather than exporting them. Industrial expansion also increased the demand for and use of oil, which caused an increase in prices and meant that American businesses and consumers turned to alternative forms of energy – like anthracite coal – just when the supply had dried up. There also were other factors on the international scene which affected coal supplies, including the drain of the Iraq war on energy sources and the need for carbon to make armor and steel plating for the war effort.

**See Committee Chronicles on p. 7
for scenes from the anthracite coal availability hearing**

Domestically, the new demands of full cost bonding put in place by the Pennsylvania Department of Environmental Protection (DEP), and stricter safety enforcement by the federal Mine Safety and Health Administration (MSHA) either made it more difficult for anthracite operations to mine coal or resulted in mines closing just when demand was peaking.

(continued on page 8)

Joint Legislative Air and Water Pollution Control and Conservation Committee

NOTES FROM THE DIRECTOR

CRAIG D. BROOKS, DIRECTOR

Forest certification has been growing in recent years here in the United States and the Forest Stewardship Council (FSC) has been a leader in promoting the opportunities associated with certification. Since the creation of the program more than a decade ago, the growth has been largely based on the purchasing policies of large retailers and the marketing of responsibly made paper products. But for certified wood products, the emerging "green" building industry may be perhaps the most significant of these market initiatives.

Landowners and companies that sell timber or forest products often seek certification as a way to verify that they have practiced forestry consistent with Forest Stewardship Council practices and support healthy forests and communities.

The design and construction industry is taking this concept and creating a movement that will likely result in buildings being less of an energy liability and having healthier environments in which to work and live, and building with responsibly produced materials that are not located in sensitive ecosystems. The forest products industry is also witnessing a movement toward more accountability for forest management practices with fewer toxins in finished products, and providing products that showcase wood characteristics.

The report of the Joint Conservation Committee's Forestry Task Force pursuant to House Resolution 256 of 2003 is now available.

The report contains information and recommendations in five areas:

-- forest planning and management on federal and state lands;

-- recreational opportunities in state parks and forests;

-- promotion of timber management to private landowners;

-- government and non-governmental acquisition of forestland; and

-- forest bioreserves.

If you would like a copy of the Forestry Task Force report, please call the committee office at 717-787-7570 or you may visit our website at http://jcc.legis.state.pa.us.

The bottom line is that the design and construction industries and the forest products industry are educating each other and the public as the program evolves. Companies that introduce FSC-certified products to new and old customers will have a true market advantage because "green" building and FSC certification is a perfect match.

In promoting this partnership, FSC and Forest Products Solutions have announced a call for submissions for the first annual Design & Building with FSC Award. Launched in conjunction with FSC's new professional training, this annual award will recognize building projects that have fostered responsible forest management through their purchase of FSC-certified wood products. The award is open to owners, architects, designers, general contractors, builders and consultants. The projects can be of any type including commercial, industrial, mixed-use or residential. To qualify, a project must consist of at least 50 percent of the new wood by cost of FSC-certified wood.

For certified wood products, the "green" building industry may be the most significant market initiative

Judges include representatives from architectural firms, the city of Seattle, Washington, the National Park Service, forest products manufacturers, Green Building Services, and the nonprofit organization Rainforest Alliance.

Projects will be judged on the use of wood, inclusion of FSC-certified wood, efforts to advance certified wood products and market incentives, and overall wood design and wood use. Awards will be given at the annual GreenBuild conference in Atlanta, Georgia, November 9-11, 2005.

Information regarding the conference and applications for projects can be found on the "green building" page of the FSC-US website at www.fscus.org.

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.

Coast Guard Warns Fund for Oil Spills Will be Drained in Four Years

– Tony M. Guerrieri, Research Analyst

A federal oil spill response fund created after the 1989 Exxon Valdez oil spill in Alaska's Prince William Sound is expected to be depleted before 2009 unless a stable source of funding is found, according to a report by the U.S. Coast Guard.

Responding to the massive Exxon Valdez oil spill, the U.S. Congress passed the Oil Pollution Act (OPA) of 1990 (P.L. 101-380). This act significantly expanded the nation's oil spill prevention and response activities. It also established an oil spill response fund. The U.S. Coast Guard has authority to use the fund to pay federal oil spill removal costs.

The fund has received revenues from four sources:
(1) taxes on domestically produced oil and imported oil refined in the United States;
(2) penalties levied by the Coast Guard for spill prevention regulation violations;
(3) cost recoveries from the spiller or other liable party; and
(4) interest earned on fund investment.

The largest source of income was the five-cent per barrel tax on oil companies until the fund reached its statutory cap of $1 billion. That tax expired in 1994.

Between the tax and the consolidation of the other federal funds, the fund at one time held $1 billion. The fund was designed to be self-sustaining using the interest earned on the original $1 billion, but increasing clean-up costs and low liability caps have eroded the principal amount.

Since the per barrel fee expired in 1994, the spill response fund has shrunk considerably. At the start of fiscal year 2005, the fund held $842 million. The report states that over the next five years, the fund will run an annual deficit of up to $200 million a year. Between reoccurring costs, appropriations for various agencies, and the increasing costs of several major spills, the fund balance will not be sufficient to sustain all of its demands starting around fiscal year 2007. By 2009 revenues and expenses would fall to zero.

The OPA makes it the ultimate insurer for oil spill removal costs and damages when those responsible cannot or do not pay. In many incidents, liable responsible parties cannot be located, do not have the ability to pay or have defenses or limits to their liability. When the recoveries from liable parties cannot fully reimburse all removal costs and damages, the fund spends more than it takes in.

The OPA put a cap on liability of private parties who spill oil, so long as they were not breaking the law or grossly negligent. The cap means that the fund may have to cover much of the costs of dealing with recent oil spills, though.

The principal amount of the Oil Spill Liability Trust Fund has eroded to the point that it is expected to have a zero balance by 2009

The report indicates that the fund collects some money from fines and interest, but it is losing money much faster than it is earning it for several different reasons.

The fund earned about $30 million in fiscal year 2004. Most of the money came from interest ($13.5 million) and cost recovery from spillers ($11 million), while a small percentage came from penalties ($5 million).

At the same time, the fund spent $143 million. The biggest expense is not the cleaning up of oil spills but feeding the agencies that administer all the regulations that came with the OPA. Those costs hit $93.2 million in 2004, up from $81.5 million in 2000. In fiscal year 2004, the U.S. Coast Guard got $52 million, the U.S. Environmental Protection Agency received $16 million and the U.S. Department of Transportation took $13 million.

The actual removal costs and damages the trust fund may have to pay are dependent on the number and severity of oil spills. Since January 1994, there have been a number of devastating spills from tank barges and ships including:

●A 265,000 gallon spill in November 2004 in the Delaware River. The oil polluted shoreline in three states (New Jersey, Pennsylvania and Delaware), killed at least 180 birds, and coated 300 commercial and recreational vessels.

●A nearly 166,000 gallon spill when a tank ship struck a bridge near Portland, Maine.

●A 538,000 gallon spill in the Mississippi River near Buras, Louisiana.

The report also addresses a number of related issues, including the implications of expediting the use of double-hulls on tank vessels that transport oil from 2015 to 2010 as well as technology and navigational measures to reduce the incidence of oil spills.

A copy of the U.S. Coast Guard Report, *"Implementation of the Oil Pollution Act of 1990"*, is available at: http://www.uscg.mil/hq/npfc/Documents/PDFs/osltf_report.pdf

EPA Gives Coastal Waters "Fair" Rating

– Craig D. Brooks, Executive Director

Despite increased federal regulations and upgraded water quality standards, a report by the U.S. Environmental Protection Agency (EPA) rates the condition of the coastal waters across the country as "fair" with little change seen in the past four years. The *National Coastal Condition Report II* looked at a variety of indicators for measuring the health of coastal waters such as water quality, sediment quality, fish tissue contaminants and aquatic life.

According to the most recent report, one-quarter of the estuarine waters are too polluted for swimming, 22 percent are impaired for fishing and 28 percent are not clean enough to support aquatic life.

Twenty-one percent of the estuarine waters were in good condition for aquatic life and human uses. Another 28 percent showed evidence of impairment of aquatic life and 22 percent are impaired for human use, including fishing and swimming. Coastal habitat, sediment quality and benthic conditions are in the worst shape, while indicators of water quality such as dissolved oxygen were shown to be in the best condition. The Northeast coastal areas and Puerto Rico have poor benthic conditions, mostly the result of poor sediment quality.

The clear message is that coastal resources are facing challenges

According to the report, shorelines along the East Coast, all of the Gulf Coast and 11 percent of the West Coast have fish consumption advisories, with mercury contamination cited as the primary problem. The percentage of advisories for estuarine waters in these areas is somewhat lower with 78 percent on the East Coast, 23 percent in the Gulf of Mexico and 20 percent along the West Coast. The report does show some improvement in coastal waters of the Southeast United States despite huge population increases in that part of the country.

EPA clearly sends the message that coastal resources are facing challenges. The agency suggests that this data provides important information about the work that needs to be done to restore coastal waters, and attracts attention to specific issues such as the need for improved monitoring, the loss of coastal habitat and sediment contamination.

The enactment of the Beaches Environmental Assessment and Coastal Health Act of 2000 established more monitoring, public notification and criteria for measuring bacteria in coastal waters. The next coastal report is not expected for several more years but will have the benefit of having increased monitoring and updated indicators that often show higher levels of bacteria.

The report is available on the Internet at http://www.epa.gov/owow/oceans/nccr.

PA Trivia Question

In 1898, Pennsylvania first purchased land for the conservation and reclamation of what natural resource?

(Answer on page 6)

Voluntary Efforts to Reduce Greenhouse Gas Emissions Increase in 2003

– Tony M. Guerrieri, Research Analyst

Since 1994, The Energy Information Administration (EIA), an independent statistical agency within the U.S. Department of Energy, has collected and released an annual registry documenting greenhouse gas emissions and reductions from corporations and government entities. The latest report, released earlier this year, documents voluntary reduction data from 2003 and records voluntary measures to reduce, avoid or sequester greenhouse gas emissions.

According to the report, *"Voluntary Reporting of Greenhouse Gases 2003"*, a total of 234 U.S. companies and organizations have reported that they had undertaken more than 2,000 projects to reduce or sequester greenhouse gases.

The report shows a steady increase of participating companies and reported greenhouse gas emission reduction projects. Since 1994, the number of reporters has grown by 117 percent – from 108 to 234. The 2,188 projects listed represent a seven percent increase over the 2,055 projects reported in 2002. Total projects reported also have grown by 245 percent since 1964.

Total greenhouse gas emissions in 2003 were estimated to be 6,936 million metric tons of carbon dioxide equivalent (MMTCO2e). Total reductions in emissions and increases in carbon sequestration increased to 373 MMTCO2e in the 2003 data year, compared with 369 MMTCO2e in 2002.

Greenhouse gases, which include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6), absorb infrared energy and prevent it from leaving the atmosphere.

The report shows increases in the number of companies participating in greenhouse gas emission reduction projects

Project-level emission reductions included 268 MMTCO2e in direct emission reductions, a level that shows 1.2 percent more reductions than in 2002, according to the report. Direct reductions are emission reductions from sources owned or controlled by the reporter.

There were 81 MMTCO2e in indirect emission reductions reported, 1.1 percent more than in 2002. Indirect reductions are from sources owned by entities other than the reporter but result from actions taken by the reporter. For example, indirect reductions are from a decrease in electricity consumption by the reporting entity, but the emission reductions actually occur at the power plant owned by the reporter's electricity supplier.

Sequestration represents increases in carbon storage, usually in forests. Forestry projects in 2003 accounted for a reported eight MMTCO2e of carbon sequestration.

In addition, 16 MMTCO2e of reductions were reported under a separate EIA 1605EZ form, which does not ask whether reported reductions are direct or indirect. Most companies also seem willing to provide more details about their efforts, with the share of companies using the long form of EIA's report improving to 85 percent, from 68 percent in 1994.

The long form allows companies to create an in depth, multi-year public record of emission-reduction efforts at the project level, including information on activities conducted outside the United States and commitments to reduce future emissions.

Additionally, the reporting entities are becoming more diverse. The EIA received reports from participants in 27 different industries or services. The electric power sector, with 98 companies reporting, continues to provide the largest number of participants to the program, 42 percent. Reporters included nearly all of the largest generating utilities in the United States.

The number of participants from outside the electric power sector, 136 reporters, was ten times the number that reported for 1994, the first year of the program.

These companies include firms engaged in automobile manufacturing, petroleum production and refining, coal mining, food processing, textile manufacturing, primary metals production, electronic and electrical equipment manufacturing, and the chemical industry.

Alternative energy providers, agriculture and forestry organizations, and organizations in government, commercial, and residential sectors also reported their emissions to the EIA.

An electronic version of the full EIA report, *"Voluntary Reporting of Greenhouse Gases 2003"*, is available at: http://www.eia.doe.gov/oiaf/1605/vrrpt/pdf/0608(03).pdf.

Inspector General Report Sees Weaknesses in Protecting Drinking Water

- Craig D. Brooks, Executive Director

A report by the U.S. Environmental Protection Agency's (EPA) inspector general suggests that the federal source water assessment program to prevent contamination of drinking water shows great promise but needs work at the federal, state and local level. While some states are using source water assessments to improve the quality of drinking water, their use is limited at the local level, and therefore the program remains vulnerable.

Despite EPA's efforts to make the program more effective, the report suggests that greater collaboration among states and local agencies is needed as well as a more secure and consistent funding source. Outreach and public education are necessary to inform the public that assessments are available. This would assist the public in understanding the information presented and show local agencies how to address risks to drinking water quality.

Keys to increased effectiveness are greater collaboration among states and local agencies and better funding sources

States are required to conduct water assessments to identify potential sources of contamination for all U.S. public drinking water systems under the Safe Drinking Water Act (SDWA) Amendments of 1996. The assessments include a map of the water source, an inventory of potential contamination and an assessment of the water system's vulnerability to this contamination. Potential sources of contamination include leaking underground storage tanks, agricultural runoff and failing septic systems.

From these assessments, each state is required to develop a source water plan. Protection itself, however, is not mandatory under the drinking water law.

By now most states have completed the mandatory water quality assessments. According to the report, about 93 percent of the 53,000 community public water systems have completed their water assessments and about 86 percent of the 160,000 public water systems have completed them. Now that most are completed, states and local communities need to use the information to put protective measures in place.

The two greatest challenges to the program are obtaining adequate funding and connecting the tools given under the Clean Water Act with protecting water sources. Some existing sources of funding include the SDWA's state revolving loan fund, the Farm Bill's Conservation Reserve Program, the Environmental Quality Incentives Program and the Wetlands Reserve Program. Each authorizes funds for safe drinking water.

Although water source protection requires start-up money, the benefits of such actions can ultimately save communities money. For example, a report by the American Water Works Association in 2004 showed that for every $1 invested in source protection, the community saved $8, clearly an environmental and economic benefit.

In the report, the inspector general (IG) recommended EPA reaffirm its commitment to source water protection and provide guidance to states on how to leverage financial and technical resources from other EPA programs, partners and interested parties.

The IG also recommended that the agency work with regional offices of the EPA and with state regulators to integrate environmental programs.

The EPA inspector general's report, *"Source Water Assessment and Protection Programs Show Initial Promise, But Obstacles Remain"*, is available on the Internet at http://www.epa.gov/oigearth/reports/2005/20050328-2005-P-00013-Gcopy.pdf.

Answer to PA Trivia Question

Forests

Source: Pennsylvania Trivia, compiled by Ernie and Jill Couch, Rutledge Hill Press

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The *Environmental Synopsis* is issued monthly.

The newsletter examines timely issues concerning environmental protection and natural resources.

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On the Horizon . . .

A LOOK AT UPCOMING EVENTS

There are no new events at this time. Please check this page each month as new events are scheduled.

Committee Chronicles . . .

REVIEW OF SOME COMMITTEE MEMORABLE EVENTS

As described in the Chairman's Corner, the Joint Committee recently held a public hearing into the availability of anthracite coal for energy. Here are some scenes from the hearing.

Committee member Rep. Thomas Petrone (left) asks a question while (from l. to r.) House Majority Whip Rep. David G. Argall, committee member Rep. Bob Bastian and committee chairman Rep. Scott Hutchinson listen.

Leadoff witnesses Michael Terretti (right) and Roger Hornberger of DEP's Mining Office offer testimony to the committee.

Joseph Wade of the Wade Financial Group describes current coal market conditions and what effect they may have on coal availability in the future.

Dan Blaschak of Blaschak Coal and the PA Anthracite Council speaks about the "perfect storm" that created hard coal shortages in 2004.

Mine safety bears a moment of closer scrutiny, particularly when one examines China's safety record. Officially, more than 6,000 Chinese miners lose their lives each year in industrial accidents, a figure that is suspected to be much higher in actuality. That's a death rate 100 times higher than that of the United States. According to China Labor Watch, while China produces about 35 percent of the world's coal, it accounts for 80 percent of fatalities globally. Some have said that being a miner in China just might be the most dangerous job in the world.

By contrast, there have been no fatalities in Pennsylvania's anthracite fields for the last five years and only eight in the bituminous fields. Nationwide in the United States, mining fatalities continue to fall. According to MSHA figures, there were 28 coal mining deaths in 2004, compared to 30 in 2003, a 10-year low of 27 in 2002 and 42 in 2001.

As a matter of fact, from 1900 through 2004, there have been a total of 21,409 fatalities in Pennsylvania's anthracite mines, the bulk of them coming before 1950. China accumulates that many fatalities in a little over three years. China does not have full cost bonding, and its environmental and safety controls are a mere shadow of Pennsylvania's and the United States'.

Joseph Wade, president and CEO of the Wade Financial Group, cited another potential supply problem – that of transportation. Chief concerns, according to Wade, are shortages of railroad cars and barges, as well as an "acute" shortage of ships and high transportation costs, particularly from smaller East coast ports.

For copies of testimony from the hard coal hearing, contact the JCC office

So what about the future? Despite the factors that have resulted in mine closures, both DEP and Blaschak agree that production of anthracite coal in Pennsylvania is stable or increasing. As Blaschak puts it, "…There is absolutely no shortage of coal in Pennsylvania. Our reserves still remain strong, but we must realize that coal is a solid fuel, and not a liquid that can be turned on and off at a moment's demand."

According to DEP's Director of District Mining Operations Michael Terretti, "It may be hard to believe, but in some instances, particularly in underground mining, anthracite coal is mined the same way today as it was at the turn of the last century." He called upon the industry to find "new and innovative ways to mine coal" and to "…make the investments that will allow them to respond to market changes."

While not sacrificing safety, Terretti said that Pennsylvania is "working aggressively" to make sure that coal can compete in a world seeking cleaner but ever larger supplies of energy.

Blaschak opined that there is a general reluctance to invest, however. "Companies are leery of investing large amounts of money into big long term mining projects, fearing that current growth won't last due to the lack of protection against cheap foreign imports," he testified.

He urged that Pennsylvania approach the federal government for bonding support for anthracite companies performing reclamation, that state institutions continue to use coal for energy but adjust their delivery procedures to allow for more flexible production schedules, and said the state should emphasize the use of Pennsylvania energy sources first in the state's energy policy.

Wade agreed that such support is necessary. "In order to make money in the coal industry, you must be able to act quickly to changing landscapes. Due to environmental and industry regulations, it is hard for coal producers to increase production to benefit from rising markets. The government must become regulation-friendly to expect mine owners to invest the capital necessary to react to market trends," he concluded.

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