

# ENVIRONMENTAL SYNOPSIS

## The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman



The Joint Conservation Committee has just released its *Annual Report – 2004*, and we'd like to share it with you. It would be a helpful reference tool for anyone interested in the committee's activities and/or a corresponding variety of environmental issues.

### In This Issue...

- The Chairman's Corner ..... p. 1
- Notes From the Director ..... p. 2
- Research Briefs ..... p. 3-6
  - ✓ *Feds Lead Brownfields Remediation Partnership Effort*
  - ✓ *Muddy Waters Result of Coastal Water Quality Report*
  - ✓ *Superfund Administrative Costs Not So Super*
  - ✓ *Knocking Down NOx Emissions in the East*
- On the Horizon ..... p. 7
- Committee Chronicles ..... p. 7

The annual report recaps the topics that the committee dealt with in 2004, and provides opportunities to obtain further information about them. Among the subjects touched on in the report are: the committee's study of whether there should be a statewide moratorium on the use of coal fly ash for mine reclamation and its participation in the national study on the use of fly ash for that purpose; the committee's continuing efforts to increase opportunities to recycle and reuse waste tires; the activities of the Legislative Forestry Task Force regarding forest resource management; aquaculture and fish consumption advisories; the 2004 Public Mind Survey (a statewide telephone poll on several issues including renewable energy); and the committee's efforts – ultimately successful – to help Pennsylvania's Oil Heritage Region achieve national designation.

The report also reviews the committee's Environmental Issues Forums and other meetings, hearings and special events held during the year. The annual report also lists the many other committee reports the committee has issued to the General Assembly over the years. And, don't forget that the committee maintains an extensive reference library of environmental and legal materials for legislative and public use.

**The Annual Report - 2004 is available on the committee's website at <http://jcc.legis.state.pa.us>, or call the committee office at 717-787-7570 for a hard copy.**

The report not only takes a look at the past year, but also offers a glimpse of the year ahead. In that regard, I have introduced House Resolution 88.

(continued on page 8)

# NOTES FROM THE DIRECTOR

**CRAIG D. BROOKS, DIRECTOR**

I read with interest recently about a French automotive engineer and former race car designer who's developed a line of cars and trucks powered exclusively by compressed air. There's no gasoline and no exhaust, and the prototype vehicles are so clean that the Luxembourg-based company says that the air coming out of the vehicle is cleaner than the air entering it.

The company, Moteur Developpement International (MDI), claims that its air-powered automobiles will eventually render the internal combustion engine obsolete. The company plans to produce vans, family sedans, taxis and small trucks and a three-passenger runabout called the MiniCat. All vehicles are currently prototypes and their bodies are made of aluminum tubing, fiberglass and injected foam. Prices are expected to range from less than \$10,000 for the MiniCat to \$16,000 for a six seat sedan called the CitiCat. Because of its size (very small – 2.65 m in length) and environmental benefits, the MiniCat has been referred to as a revolutionary urban solution because it's easy to park and is nonpolluting.



So how does it work? While the idea of using compressed air isn't new, technology has advanced it to a new level. The power is generated from fresh air stored in reinforced tanks located beneath the chassis and compressed to 4,500 pounds per square inch - about 150 times the pressure of a car tire. The air is then fed into four cylinders where it expands, driving specially designed pistons. The cars can reach a speed of 70 mph and have about a 120 mile range before they need to be recharged. Recharging the onboard tanks takes about four hours and uses a small compressor that can be plugged into any wall outlet. Gas stations equipped with special air pumps would be able to fill the tanks in about three



minutes. The oil needs to be changed only every 31,000 miles. Critics say that the cars have trouble living up to the range projections, but MDI is trying to overcome this by warming the stored air.

## Could the "air car" be the answer to auto air pollution, and to mass transit as well?

The question is, "When will the car be on the street?". Although a number of dates were previously released, technological and financial delays were inevitable. Investment capital has been hard to come by, but there is a surging demand for more eco-friendly transportation such as hybrid vehicles.

The first production plant in Nice, France is now complete and it's predicted that the factory will produce 3,000 cars each year with 70 staff working one eight-hour shift a day.

The company's first attempt at raising capital was unsuccessful, when it initially offered 250,000 shares of stock at \$2 a share. There were no takers. Now, MDI hopes that selling franchises to investors will help sell and spur production of the vehicles.

It is estimated that \$20 million would be needed to build and sell MDI vehicles in the United States. MDI has currently signed 50 factories in Europe, the United States and Asia and is offering 20 licenses in the United Kingdom.

The model to be produced in the Nice factory, the MultiCat (a train with tires) applies this technology to commercial and public service vehicles for public and freight transportation. The MultiCat consists of a driver module and up to four transport modules and could hold up to 135 passengers. MDI says that the cost of operating such a vehicle is so low that cities could practically offer free urban transport to its citizens.

More information about MDI and the compressed air vehicles can be found at [www.theaircar.com](http://www.theaircar.com).

---

# 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.**

---

## **Federal Agencies Partner in Brownfields Redevelopment Effort**

**— Tony M. Guerrieri, Research Analyst**

**B**rownfields are abandoned, vacant, derelict, or underutilized commercial and industrial properties where past actions have resulted in actual or perceived contamination. Confronted with hundreds of thousands of brownfields in cities and towns across this country, nearly every community has been impacted in some way by the potential health hazards and urban blight brownfields represent. The U.S. Environmental Protection Agency (EPA) has established a partnership with federal agencies, states, cities, and other organizations to assure a coordinated strategy for addressing brownfield issues.

According to an EPA report, 23 federal agencies involved in brownfields redevelopment projects have begun work on more than 75 percent of the commitments and initiatives set forth in the 2002 Brownfields Federal Partnership Action Agenda. The EPA report, *"Brownfields Federal Partnership Action Agenda: Progress Report"*, reviews the efforts of federal partnerships in achieving the mutual goals of environmental protection and economic revitalization, noting more than 100 "commitments, new initiatives, events, and activities" undertaken by federal agencies together with local communities to deal with brownfield sites.

Federal agencies offering technical and other assistance to communities through the action agenda include the departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Interior and Justice, as well as the U.S. Army Corps of Engineers, Agency for Toxic Substances and Disease Registry, National Institute of Environmental Health Services, Office of Surface Mining, Bureau of Land Management, U.S. Geologic Survey, and the National Park Service. Collectively, they have invested billions of dollars in brownfields projects.

According to the report, the EPA awarded approximately \$150 million in grants in 2003 and 2004 for brownfields assessment and cleanup activities and for

job-training grants to communities nationwide, and \$100 million to states and tribes to establish or enhance their brownfields programs.

Many brownfields are located in coastal communities, as historically, industries were situated along the shore for access to water for transportation, power and cooling. Of the 500,000 brownfields nationwide, an estimated 10-15 percent are located along waterways and coastal areas. The EPA has worked with the National Oceanic and Atmospheric Administration and other partners to establish three pilot projects focusing on redeveloping brownfield sites in ports and harbor areas. The first three Portfield Pilots are located in New Bedford, Massachusetts; Tampa, Florida and Bellingham, Washington. New Bedford, for example, has received \$5 million from the Commonwealth of Massachusetts to conduct navigational dredging in coordination with the EPA's Superfund cleanup of New Bedford Harbor. Private sector users are contributing \$200,000 to this effort.

---

### **A Hazleton, PA brownfields site – the CAN DO Innovations site – has been selected as one of six national mine-scarred land demonstration projects**

---

The EPA and the Department of the Interior's Office of Surface Mining convened a multi-agency Mine-Scarred Lands Working Group in 2003 to address the challenges associated with the reclamation and redevelopment of mine-scarred lands. The working group identified six demonstration projects across the U.S. where the opportunity exists to work collaboratively with local communities to provide funding and technical assistance to clean up mine-scarred lands, identify community redevelopment needs, and coordinate action plans. The demonstration projects will provide the federal partners with valuable insights and lessons learned related to the unique barriers and opportunities presented by mine-scarred land cleanup and reuse.

The CAN DO Innovations site in Hazleton, Pennsylvania has been selected by the Working Group as one of the six national brownfields mine-scarred lands

demonstration projects. The "CAN DO Innovations site" is a 75-acre anthracite coal mine site, which is part of the larger Cranberry Creek Gateway corridor project that involves 366 acres of contiguous mine-scarred lands.

The report also notes that the Department of Housing and Urban Development (HUD) carried out a marketing effort that nearly doubled the number of Brownfields Economic Development Initiative applications it received. The Brownfields Economic Development Initiative is a key competitive grant program that HUD administers that is designed to stimulate economic and community development.

In 2003, HUD awarded \$22.4 million in grants and \$87.8 million in Section 108 loans for brownfields redevelopment. Section 108 loans allow communities to transform a small portion of their HUD grants into federally guaranteed loans large enough to pursue physical and economic revitalization projects that can renew entire neighborhoods.

The EPA's *Brownfields Federal Partnership Action Agenda: Progress Report* is available at: [http://www.epa.gov/brownfields/partners/fpaa\\_0904.pdf](http://www.epa.gov/brownfields/partners/fpaa_0904.pdf).

## Coastal Conditions Improve for Great Lakes Region, Remain Unchanged in Others

— Craig D. Brooks, Executive Director

A new report suggests that coastal water quality conditions in the Great Lakes and estuaries in the Southeast and the Gulf of Mexico have improved in many areas since the 1990's. However, the report, released by the U. S. Environmental Protection Agency (EPA), the National Oceanic and Atmospheric Administration, the U.S. Geological Survey, and the U.S. Fish and Wildlife Service also found that many Northeast and West coastal areas have remained unchanged.

Under Section 305(b) of the federal Clean Water Act, states are required to report on the conditions of their rivers, lakes and streams every two years. The report is based on large volumes of monitoring data collected and measured between 1997 and 2000. Ecological assessment of the data shows that the nation's estuaries are in fair condition, with poor conditions existing in the Northeast Coast and Puerto Rico regions.

For EPA, issues regarding coastal conditions can often be reduced to three simple questions: Are the waters swimmable? Are the waters fishable? Do the waters support aquatic life?

Among some of the findings are:

- Twenty-one percent of the assessed waters are not impaired, 35 percent are impaired, and 44 percent are threatened.

- Twenty-three percent of estuaries are impaired for swimming because of poor clarity. This is best analyzed using a measure for microbial contaminations of waters or sediments. However, no measure of bacteria was factored into the conclusion.

- Twenty-two percent of the estuaries sampled in the United States exceed risk-based non-cancer guidelines for consumption of four eight-ounce meals per month. An additional 15 percent of the sites showed contaminant concentrations within the range of these non-cancer guidelines. The overall suitability of waters for fishing received a national rating of fair.

- Twenty-eight percent of estuaries do not meet standards for aquatic life, which is based on water quality conditions, sediment quality and habitat loss.

Based on the combination of five component indicators: water quality index, sediment quality index, benthic index, coastal index, and fish tissue contaminants index, the overall condition of the nation's waters is fair.

It is interesting to note that the number of coastal and estuarine waters under fish consumption advisories represent an estimated 74 percent of the shoreline miles of the United States, including 92 percent of the East Coast and 100 percent of the Gulf Coast. Every Great Lake is under at least one advisory, and advisories covered 100 percent of the Great Lakes shoreline.

The report, "National Coastal Condition Report II" is available on EPA's website at <http://www.epa.gov/owow/oceans/nccr2/>. The document number is EPA-620/R-03/002.

### PA TRIVIA QUESTION:

How far does Presque Isle State Park jut into Lake Erie?

(See p. 7 for the answer)

## Information on the Superfund's Administrative and Support Costs

— Tony M. Guerrieri, Research Analyst

Nearly 25 years after the establishment of the Superfund program and total expenditures of hundreds of billions of dollars for cleanups, 1,518 sites have been cleaned up or are being cleaned up. The administrative and support costs for the Superfund program have been the subject of long-standing debate. According to a report by the U.S. Environmental Protection Agency's (EPA) Office of Inspector General (OIG), while overall Superfund program spending decreased from 1999 to 2003, administrative and support expenditures increased during that time.

The report, "OIG Response to Congressional Request on Superfund Administrative Costs", reviews the Superfund program's expenditures over the last five years (1999-2004), to determine how much of total Superfund spending was for administrative management and support work, in contrast with other activities.

The EPA spends about \$1.6 billion a year on the Superfund program to address the potential threats to human health and the environment resulting from hazardous waste sites. The Superfund program operations are funded by appropriations from the Superfund trust fund. Historically, a tax on crude oil and certain chemicals and an environmental tax on corporations were the primary sources of revenues for the trust fund; however, the authority for those taxes expired in 1995.

According to the report, total Superfund program appropriations decreased during the period from 1999 to 2004. In 1999, the Superfund program received \$1.367 billion. The 2004 Superfund appropriation of \$1.249 billion represents a nine percent reduction in spending power.

Since 2000, the Superfund program has increasingly relied on revenue from general revenue fund appropriations. In 2004, the \$1.249 billion appropriation from the general revenue fund was the only source of funds for the Superfund program.

For the period from 1999 through 2003, the EPA's expenditures for the Superfund program totaled just over \$8 billion. The Superfund program expenditures between 1999 and 2003 have fluctuated between \$1.714 billion and \$1.526 billion, a decrease of about 11 percent.

Based on detailed analyses of spending in the Superfund program, the OIG report indicates that the share of Superfund programmatic expenditures that are specifically driven by environmental statute and program activities - such as cleanup activities - decreased between 1999 and 2003 from \$1.3 billion in 1999 to just over \$1.1 billion in 2003, a total of \$174 million. During that same time, the EPA's Superfund costs for administrative and support activities correspondingly increased by \$36.8 million. Several EPA offices in headquarters and the regional offices support the Superfund program in such areas as budget, financial management, contracts management, grants administration, human resources, legal counsel, information management, and facilities management.

---

**According to the OIG report, while programmatic expenditures have gone down, administrative and support expenditures have gone up**

---

According to the OIG report, during the last five years, programmatic costs accounted for 75 percent of the total expenditures, but administration management and support expenses comprised 25 percent.

The OIG report examined the EPA's Superfund personnel costs because they account for a significant share of all Superfund administrative costs. Over the five-year period, Superfund personnel-related spending totaled about \$1.5 billion. Of this, about 78 percent was for regional personnel-related spending, and the remaining 22 percent was for headquarters personnel-related spending.

The number of full-time employees (FTE) in the Superfund program has fallen. There were 3,330 FTEs in 1999. By 2003, the number of FTEs had dropped seven percent, to 3,088. Even though the number of

### News to Use in the Environmental Synopsis... share it with a friend

The *Environmental Synopsis* is issued monthly.

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

If someone you know would like to receive a copy of the *Synopsis* each month, please contact the committee office at 717-787-7570.



**Printed on Recycled Paper**

FTEs has decreased, personnel-related expenditures, such as compensation and benefits, accounted for nearly 80 percent of total known administrative expenditures over the five years.

The EPA indicated personnel costs are rising and are funded, to some degree, by reductions in program resources. For example, personnel-related costs increased from \$288 million in 1999 to \$332 million in 2003, while at the same time non-personnel administrative costs decreased from \$87 million in 1999 to \$82 million in 2003. Much of the increases are attributable to personnel costs, such as cost of living allowances.

The report points out that data on expenditures are not totally accurate, as they do not account for direct expenditures made by responsible parties. Given that responsible parties currently conduct about 70 percent of Superfund cleanups, the EPA expenditure data underestimate the actual amount spent on remediation or other programmatic activities.

The report, "OIG Response to Congressional Request on Superfund Administrative Costs", is available at [www.epa.gov/oig/reports/2004/20040915-2004-S-00004.pdf](http://www.epa.gov/oig/reports/2004/20040915-2004-S-00004.pdf) on the World Wide Web.

## Eastern States Reduce NOx Emissions

— Craig D. Brooks, Executive Director

Nitrogen oxide emissions in 21 Eastern states and the District of Columbia declined more than 50 percent from 1990 to 2003, according to a report by the U.S. Environmental Protection Agency (EPA). Emissions in these states declined from almost 2 million tons in 1990 to about 900,000 tons in 2003. Between 2000 and 2003 alone, NOx emissions in these states declined nearly 33 percent. Most of the emission reductions came from NOx reductions from coal-fired power plants.

The report attributes the reductions to several national and regional programs that require emissions reductions, including several market-based emission trading programs being implemented in these states. EPA is currently implementing a program called the NOx SIP (State Implementation Plan) Call in 21 states. The program is designed to reduce NOx emissions from power plants and other major sources by 1 million tons per year by 2007. All the states are reducing their emissions through an emissions trading program called the NOx Budget Trading Program.

Nine of the 21 states and the District of Columbia

reduced their emissions by 70 percent from 1990 levels. These states were members of the Ozone Transport Commission (OTC) which operates a regional emission trading program for NOx. The OTC states adopted more stringent emission limits under the NOx Budget Trading Program in 2003.

The report also attributes some of the reductions to requirements under the Acid Rain Program. Enacted by Congress in 1990 in Title V of the federal Clean Air Act, the acid rain program requires coal-fired power plants nationwide to reduce their nitrogen oxide emissions rates. The program has actually exceeded its goal of reducing nationwide NOx emissions by 2 million tons from what they would have been without the program. This shows that the cap and trade mechanisms are an effective way of controlling pollutants on a regional basis.

The following is a snapshot of national and regional NOx control programs:

— **Acid Rain NOx Reduction Program (ARP)** – Annual national program that controls NOx from electric generation units. Sources are required to meet certain NOx emissions. The program began in 1986 with a second phase initiated in 2000. There is no cap on emissions for allowance trading.

— **Ozone Transport Commission (OTC) NOx Reduction Programs** – Collaborative effort in Northeast states to achieve ozone reductions in several phases. In Phase I, sources were required to reduce their annual NOx emissions to meet Reasonably Available Control Technology requirements. In Phase II, states participated in cap and trade programs, the OTC NOx Budget Program, to achieve ozone reductions. In 2003, the OTC NOx Budget Program was replaced by the larger NOx Budget Trading Program.

— **NOx State Implementation Plan (SIP) Call** – Building on the work done with the OTC, the SIP requires states that significantly contribute to ozone non-attainment problems in other states to reduce their seasonal ozone beginning in 2003. This rule gave states some flexibility in choosing emissions reduction options, including participation in the NOx Budget Trading Program.

— **NOx Budget Trading Program** – An ozone season cap and trade program intended to help states meet their NOx SIP Call requirements. Twenty-one states and the District of Columbia are participating.

The report, "NOx Budget Trading Program 2003 Progress Report", is available on EPA's website at <http://www.epa.gov/airmarkets/cmprpt/nox03/noxreport03.pdf>.

# ON THE HORIZON . . .

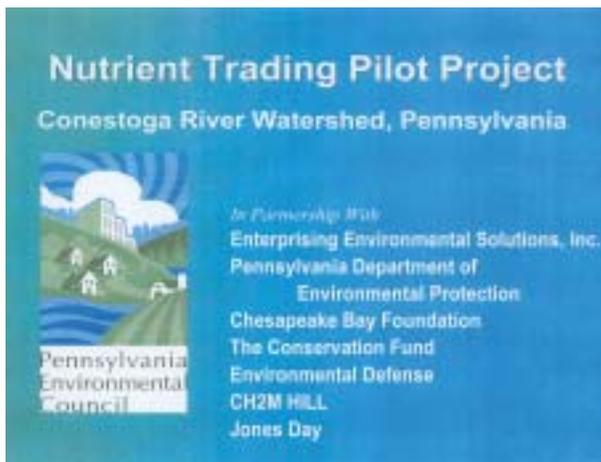
A LOOK AT UPCOMING EVENTS

✓ **Tuesday, April 12, 2005, 8:30 a.m., Room 205, Matthew J. Ryan Building – Environmental Issues Forum.** Celebrate Earth Day early as Julia Marano, executive director of Keep Pennsylvania Beautiful, speaks about the organization's and Pennsylvania's anti-litter, community enhancement and greening, and proper waste handling efforts, including the upcoming Great Pennsylvania Cleanup, scheduled for April 23, 2005.

**Environmental Issues Forums are open to the public.  
Please call the committee office at (717) 787-7570 if you would like to attend.**

# COMMITTEE CHRONICLES . . .

REVIEW OF SOME COMMITTEE  
MEMORABLE EVENTS



One of the committee's most recent Environmental Issues Forums (EIF) featured guest speaker Andrew McElwaine, president and CEO of the Pennsylvania Environmental Council who offered a presentation on the state's nutrient trading program, the completion of the first successful trade by PEC and a grant PEC will be using to establish best management practices regarding the trading program.

Pictured at right is McElwaine making a point

about the trading program and the benefits it is expected to bring to Pennsylvania.

Below is a part of the large crowd that attended the forum.



A limited number of copies of McElwaine's PowerPoint presentation are available from the committee office. Call 717-787-7570.



**Answer to the PA Trivia Question: Seven miles**  
*Source: Pennsylvania Trivia compiled by Ernie and Jill Couch, Rutledge Hill Press*

HR88 is a concurrent resolution which would establish a task force under the committee's jurisdiction to study issues concerning sewage management and treatment at publicly owned treatment systems and facilities throughout the commonwealth. The resolution is cosponsored by 70 House members from both parties and has been referred to the Environmental Resources and Energy Committee.



The issue is an important one when you consider that approximately 9 million Pennsylvania citizens are served by public sewage collection and treatment systems, and that EPA and DEP have estimated

that the upkeep and replacement costs of rapidly aging system infrastructure amount to more than \$8 billion. The systems already represent tens of billions of dollars of capital investment and they must operate around-the-clock, all the while having to meet ever more stringent compliance standards. They often represent a community's largest environmental investment and play a key role in maintaining environmental health as well as being key factors in a community's economic development and growth.

The resolution calls upon the task force to examine and review the findings of EPA's 2000 Clean Water Needs Survey as they relate to Pennsylvania's sewage treatment systems, and the ability of the systems to meet the survey compliance goals from legal, technical and financial perspectives. The task force would also be directed to study the use of new, alternative or innovative technology to achieve survey goals. The task force and its advisory committee could also open up new areas of study based on what information is presented to it. Ultimately, the task force is to present its findings with any legislative recommendations to the General Assembly.

Similar in structure to the committee's Legislative Forestry Task Force, the new task force would be composed of four legislators (two senators and two representatives), one of who would chair the panel. The task force would work with a diverse advisory committee which would help to gather information, establish facts and develop recommendations concerning the future of the state's sewage treatment systems. The advisory committee would include representatives of the state Department of Environmental Protection (DEP) and the federal Environmental Protection Agency's (EPA) Region III staff, representatives of the operations management for publicly owned sewer systems, consulting engineers specializing in sewage treatment system design and operation, and experienced practitioners of public accounting, finance or economics related to the design, construction, operation or maintenance of public sewer systems.

## How to Contact The Joint Conservation Committee

**Phone:**  
717-787-7570

**Fax:**  
717-772-3836

**Location:**  
Rm. 408, Finance Bldg.

**Internet Website:**  
<http://jcc.legis.state.pa.us>

**Mail:**  
Joint Conservation Committee  
PA House of Representatives  
House Box 202254  
Harrisburg, PA 17120-2254

