State of Illinois Rod R. Blagojevich, Governor

Environmental

Illinois Environmental Protection Agency Douglas P. Scott, Director



Winter-Spring 2007

Vol. XXXIII, No.1

Using Innovative Techniques at Chicago's Cluster Sites



TER

www.illinois.gov



"There is no real economic security, opportunity or quality of life for our citizens if we do not place a high priority on protecting the environment."

> Rod R. Blagojevich Governor of Illinois



Vol. XXXIII, No. 1 Winter - Spring 2007

Environmental Progress is published by the Illinois Environmental Protection Agency Douglas P. Scott, Director.

Please send address changes and other correspondence to: *Environmental Progress*, Illinois EPA, P.O. Box 19276, 1021 North Grand Avenue East, Springfield, Ill. 62794-9276. Questions or comments may be directed to 217-557-9069.

*Editor:* Dennis McMurray

*Contributors:* Brenna Coffman, Nina Dugger, Carol Fuller, Steve Kolsto, Stan Komperda, Mara McGinnis, Dennis McMurray, Kristi Morris-Richards, Eric Runkel

*Graphic Design and Production:* Beth Anderson

*Photography:* Bob Wiatrolik

### Contents

### 3. Director's Viewpoint:

Clean Air Progress: Illinois shows leadership on reducing mercury, smog and soot, and greenhouse gases.

#### 5. Paxton II/Lake Calumet Cluster Sites:

With some help from goats and reconstruction of a major expressway, IEPA moves forward on addressing extensive environmental contamination near Lake Calumet in Southeast Chicago.

#### 8. Right-To-Know:

Illinois EPA implements new law requiring increased notification and community outreach for environmental impacts on private wells and other hazards.

#### 11. IRID:

New Illinois Removes Ilegal Dumps (IRID) program cleans up festering open dumps around the state.

### 12. Governor's Environmental Corps:

IEPA summer internship program that matches college students with Agency mentors continues to be a success.

### 14. Pollution Prevention Interns:

IEPA program placing college students with companies has produced significant cost savings and environmental benefits since 1989.

#### 15. LEAP:

Lake Education Assistance Program fosters better understanding of the need to protect water resources for Illinois students.

#### 16. Robbie Lawerence:

Nine-year-old Pekin boy is honored for his key role in obtaining a clean water supply for his subdivision.

### 18. Re-Use It Center:

Kane County organization is recognized for innovative projects benefiting the community and environment.

#### 19. New Laws:

Roundup of recent state environmeental legislation

#### 20. Green Pays on Green Days:

Program to enlist citizens in the Chicago metro area to help reduce air pollution completes its fifth summer with record participation level.

#### 21. Annual Air Quality Report:

Latest statewide data from IEPA air monitoring network.

### 22. Annual Landfill Capacity Report:

Latest information on the capacity of Illinois' landfills and solid waste disposal practices.

#### 23. Bill Compton Award:

New IEPA award to recognize corporate environmental stewardship named in honor of longtime Caterpillar Co. environmental manager.

### 24. State Fair:

*Recyclable Racecar wins awards and is a hit with State Fairgoers.* 

#### 25. Korean Visit:

South Korean Ministry of the Environment officials exchange views with IEPA staff on water protection strategies.

### 25. Brownfields:

Galesburg, Granite City, Broadview and Blue Island receive IEPA grants to help clean up contaminated sites for redevelopment.

#### 27. Clean School Bus:

Effingham and Taylorville join Clean School Bus Program

### 28. Drinking Water Infrastructure Loans:

Litchfield, Geneva and Sycamore get IEPA lowinterest loans to upgrade or expand drinking water treatment facilities.

### 29. Wastewater Infrastructure Loans:

Evanston and Rockford area get IEPA low-interest loans to upgrade sewers and wastewater treatment plant.

#### 30. Youth and the Environment: Posters/Poetry, Green Youth, Science Fair, Earth Stewardship Day

*Front Cover:* Goats eat weeds and help maintain prairie grass vegetation on the re-contoured cover for Paxton II landfill near Lake Calumet in Chicago.

*Back Cover:* Parade of trucks carries excavated soil from the Illinois Department of Transportation's Dan Ryan Expressway Reconstruction Project for use in the capping of the Lake Calumet Cluster Sites

### **Director's viewpoint**



by Director Douglas P. Scott

### Illinois Takes National Leadership Role on Reducing Mercury and Greenhouse Gases

While overall outdoor air quality in Illinois has steadily improved in the past three decades, Illinois has taken some additional major steps forward more recently, showing regional and national leadership in addressing mercury and other pollutants from coal-fired power plants and reducing greenhouse gases that contribute to global warming.

Governor Rod Blagojevich kicked off a series of important clean air initiatives in January 2006 with his plan to reduce mercury emissions from the state's 21 coalfired power plants by 90 percent by June 2009.

Governor Blagojevich and Illinois EPA felt strongly that a federal mercury reduction plan finalized by U.S. EPA in May 2005 did not go far enough in addressing mercury emissions into the air that accumulate in fish and can cause health hazards, particularly various neurological problems, for unborn children, infants and young children. If Illinois had not opted out of the federal plan, the reductions required for Illinois coal-fired power plants would be an estimated 47 percent by 2010 and 69 percent by 2018.

"The new federal mercury regulations don't go far enough in protecting the public from what we know are very dangerous emissions. That's why we are proposing much stronger regulations here in Illinois to make sure people can safely enjoy our air and water, and the fish from our rivers and lakes," Governor Blagojevich stated.

Governor Blagojevich and Illinois EPA were concerned that levels of reductions under the federal rule were too little and too late and would impede the state's efforts to encourage clean-coal technology that will allow Illinois' abundant coal reserves to be used in an environmentally responsible manner. In addition, we were concerned that under the federal rule, operators of older, higher-polluting plants would have an unacceptable "escape clause" ——an option to buy interstate mercury emission "credits" from operators of cleaner plants. Potentially, Illinois' oldest plants in greatest need of controls would be able to buy credits in other states and not have to make any real reductions on their own. Interstate trading could also aggravate existing mercury "hot spots" in our state. Our state plan specifically does not allow for the trading, purchasing or the banking of allowances, ensuring that reductions occur both statewide in Illinois and at every power plant in order to address local impacts and reduce "hot spots."

The Governor's plan was strongly backed by a variety of major health and environmental advocacy organizations across the state and thousands of individual citizens wrote the Illinois Pollution Control Board in support of it.

During the course of several hearings before the Illinois Pollution Control Board, and review by the legislative Joint Committee on Administrative Rules, on behalf of Governor Blagojevich, Illinois EPA also reached some landmark agreements with the state's three largest coal-fired power plant operators. The agreements with Ameren, Dynegy and Midwest Generation will not only achieve mercury reductions but also significantly reduce nitrogen oxides and sulfur dioxide emissions that contribute to smog and soot and can aggravate heart and lung diseases. These bonus reductions, under a voluntary "multi-pollutant strategy" the companies agreed to support, will also be substantially higher than federal regulations would have required. At the same time it will give the operators the flexibility to use control technologies that reduce several pollutants. I want to personally commend these companies for stepping up to the plate and showing leadership in the power industry by joining us in moving forward on cleaner air.

The Pollution Control Board gave its final approval to the mercury rule last November 2, declaring that it met the criteria of being technically feasible and economically reasonable and "allows flexibility to achieve compliance and will provide health benefits for the citizens of Illinois." The Joint Committee on Administrative Rules unanimously endorsed the rule on December 12, 2006.

Meanwhile, Governor Blagojevich has also announced a series of major initiatives to make Illinois a leader among the states in the critical fight against global warming, certainly one of the great environmental challenges facing all of us. We share the concerns of scientists that unabated global warming could have serious consequences in Illinois and across the Midwest, including decreased agricultural production, more frequent flooding and disruption of sewage infrastructure and introduction of invasive species that could disrupt natural ecosystems.

In August, Governor Blagojevich unveiled an ambitious energy independence plan that includes several elements that will reduce greenhouse gas emissions, including the investment of \$775 million to help build ten new coal gasification plants and construction of a pipeline to move carbon dioxide captured from coal gasification plants to oilfields in Southeastern Illinois. In November, a Request for Proposals was issued for the pipeline that would transport the carbon dioxide captured by the coal gasification plants and use the pressurized carbon dioxide to extract additional oil in Illinois. Royalties from the recovered oil and gas would subsidize the cost of the pipeline and for permanently storing the carbon dioxide underground. This innovative plan combines a reduction of greenhouse gas emissions while allowing Illinois to use its own resources, such as our abundant supplies of coal, to meet more of our energy needs. The new coal gasification plants, the carbon dioxide pipeline and new ethanol and biodiesel production plants will eventually supply 10 percent of our electricity needs, 25 percent of our diesel fuel needs and 25 percent of our natural gas demand under the Governor's plan.

Besides a goal of making E-85 (ethanol) fuel available throughout the state as well as increased biodiesel and ethanol production and availability, the Governor's energy plan includes financial and technical incentives to make Illinois a national leader in wind power, such as a recent grant to move forward a wind farm in McLean County that will provide renewable energy for about 120,000 homes. The Governor has committed to one of the largest wind power purchases by any state government through a recent agreement with City Water Light and Power in Springfield involving sufficient energy for 141 state facilities.

In October, Governor Blagojevich announced his Global Warming Initiative, including issuing an Executive Order creating an Illinois Climate Change Advisory Group the Governor asked me to chair, that will take an indepth look at what policies and strategies Illinois can adopt to reduce greenhouse gas emissions in both the public and private sectors. The Advisory Group has broad spectrum representation, including business, labor, energy and agriculture sector representatives, scientists, economists and environmental advocates and is currently working with a leading environmental think tank, World Resources Institute, in evaluating potential options for Illinois to reduce greenhouse gas emissions, with a report and policy recommendations to the Governor anticipated by July.

As part of the initiative, Illinois will become only the second state (after New Mexico) to join the Chicago Climate Exchange (CCX) and will make a voluntary, but legally binding, commitment to reduce greenhouse gas emissions from the electricity and fuel needed to operate state facilities and motor vehicles.

The Executive Order builds on previous initiatives by Governor Blagojevich and Illinois EPA to address global climate change that include a strong component of market-based trading systems. In January, for example, Illinois became the first state in the nation to offer farmers and other landowners the opportunity to earn and sell greenhouse gas emissions credits by adopting various conservation practices to limit airborne levels of carbon dioxide and methane. The Illinois Conservation and Climate Initiative has enrolled around 600 landowners with more than 115,000 acres as of late spring of this year. Credits are sold through CCX and participants can earn and sell carbon credits through such practices as utilizing methane manure digesters, conservation tillage and growing trees and grasses.

As we build up greenhouse gas emission credits to trade from further reductions from state facilities and vehicles, we are particularly pleased to work with CCX, which has an established track record and is an Illinois-based company, with more than 100 members, including large industrial companies, utilities, universities, cities, and non-governmental organizations. Members based in Illinois include Baxter Healthcare International, Motorola, Square D Electronics, and the City of Chicago.

As Chair of the Midwest Governor's Association, Governor Blagojevich has also challenged our neighboring Midwestern states to work together to address a broad range of air emission issues. We have held a number of meetings with other Midwestern states, as well as states on the East Coast to work on multi-state strategies to address air pollution that does not respect state borders. In May, Illinois joined 30 other states as charter members of The Climate Registry, the largest multi-state effort to address climate change. Illinois helped create the new organization which will provide national standards for businesses and government to measure and track their greenhouse gas emissions over time. Although participation is voluntary, several companies, including ones operating in Illinois, have indicated their support and intent to participate.

Last fall I was also privileged to attend the national Pew Conference on Global Warming in Washington and to visit with California environmental officials on their efforts to address greenhouse gas emissions. The information obtained from those meetings will be invaluable as the Advisory Group does its work and also in my capacity as the new Chair of the Air Committee of the Environmental Council of the States, the national organization of state and territorial environmental agencies.

While there are certainly advantages to uniform national environmental regulations, when the federal government falls short of its responsibilities, as we believe is the case with mercury and greenhouse gas reductions, it is important that our state governments step up and take progressive and innovative actions. Governor Blagojevich and Illinois EPA are committed to continue doing just that to improve and protect the air our citizens breathe.

### Work Moves Forward on Lake Calumet Cluster Sites/Paxton II Landfill Repair Maintenance

### Area was historic industrial and municipal waste dumping ground for Chicago region

Starting at least as far back as the 1940s, an 87-acre marshy area in southeast Chicago near Lake Calumet that had been strip-mined for sand to be used in the steel mills of the area, became a massive dumping ground for large amounts of industrial and municipal waste from the metropolitan region, as thousands of drums of chemicals, slag from steel mills and solvents from refineries were either disposed in the strip-mined areas, or were often improperly managed at an incinerator that formerly operated there.

With most of the disposal activity starting long before environmental regulations took effect, difficulty in identifying responsible parties and landowners, and in some cases parties continuing to operate illegally in defiance of enforcement efforts, the "Lake Calumet Cluster



Great Pyrenees sheep dogs Spike and Jack were raised with the goats at Paxton II and protect them from potential predators.

Sites" has been one of the biggest environmental cleanup challenges in the Chicago area and in the State of Illinois.

Sampling of soil and groundwater in the area had long revealed a toxic stew of chemicals, such as PCBs, organics, heavy metals—more than 130 chemicals in all detected at concentrations above what triggers corrective or remedial action.

Fortunately, there are few nearby residences to this industrial area, but there is a surprisingly rich ecosystem of marshes and abundance of birds and wildlife, including Indian Ridge Marsh, which is the second largest known rookery of the black-crowned night heron in the state, for example.

In early 1999, an engineering study done for Illinois EPA warned of the potential of a catastrophic collapse of one or more slopes of the nearby towering 170-foot high Paxton II landfill, actually the highest non-structural point in Cook County at its top. Unless something was done, the mountain of garbage could collapse causing a "garbalanche" releasing several hundred thousand cubic yards of garbage, spilling millions of gallons of contaminated leachate (garbage mixed with rainwater) onto adjacent properties, attracting and dispersing disease-carrying vermin, and igniting potential fires and explosions when the high internal temperatures and flammable gases would suddenly be exposed to oxygen. Improperly constructed and poorly operated, the landfill had extremely steep and unstable slopes as well as little cover over much of the refuse.

The Legislature responded to a request by the Illinois EPA for state funds to avert this potential disaster and starting later in 1999, work started on a stabilization effort to reduce the threat of collapse from ongoing erosion and the buildup of liquids within the landfill. The top had developed a bowl-shaped depression, collecting rain and snow that percolated into the landfill and eroded the sides. In the meantime, Illinois EPA continued to



Mary Stowe of Rainy Acres Farm in Wilmington manages the goat herd at Paxton II.

work closely with Chicago's fire, emergency response, police and street departments on contingency plans in case a garbalanche did occur. As the stabilization work began, on the street in front of Paxton II, the City even erected what is likely the only street sign of its kind in the nation: "Caution: Landfill Slope Failure Zone Next 1/2 Mile."

### Environmental

Progress

Over the next five years, around \$20 million was spent extensively re-grading, re-contouring and capping the top 15 acres of Paxton II to prevent erosion. The Illinois EPA also installed an innovative drainage system that utilizes used tires, as well as an extensive leachate management system that collects an average of 10,000 gallons per day. Twenty-four gas collection wells and a flare have also been installed to capture and destroy methane and other gases.

One of the last steps in the project was the planting of prairie grasses on the new cap and the slopes of the landfill to aid in preventing erosion.

But a problem arose when phragmites, a tall reed that grows up to 13 feet high, begin crowding all the other plants out in the first two years of 2003-2004, noted Stan Komperda, the former IEPA Bureau of Land project manager who oversaw most of the Paxton II stabilization



This photo, taken in 1989, showed standing water at the former Paxton I disposal and incinerator area.

work. Komperda came up with the idea of goat grazing after hearing of their use to control vegetation in California. Because of the size of the site and steep slopes, normal mowing and weeding operations would be difficult and expensive, but it was a natural terrain for goats, Komperda noted. "The goats eat the phragmites and like the broadleaf plants and tend to ignore the grasses so we decided to give them a try and they have been effective and the prairie grasses are now taller than the surrounding weeds."

The Paxton II goat herd came from Rainy Acres Farm in Wilmington, operated by Dave and Mary Stowe. During the first spring and summer in 2005, wild dogs and coyotes posed a threat to the goats, so livestock fences and pens were added the next year,

Jack and Spike joined the Paxton II site maintenance team. Jack and Spike are Great Pyrenees dogs, a breed renowned as shepherds, each weighing about 120 pounds. They were raised with the goats and trained to herd them and protect them from potential predators. Jack and Spike excelled at protecting their flock and no goats were lost in 2006, as they made their daily contribution of grazing up and down the slopes of Paxton II and eating not only the phragmites but other weeds, such as Canada thistle and sage that also tend to crowd out the prairie grasses. The prairie grasses are the most desirable plants because they are the most effective in preventing erosion. The goats were trained to eat the Canada thistle on the landfill



Hundreds of trucks line up to drop their loads of soil from the IDOT Dan Ryan Expressway Reconstruction Project for use as cover in the remediation of the former Paxton I waste disposal area.

by mixing garlic powder with water and spraying it on several of the plants. The lush vegetation that covers the site now dramatizes how far Paxton II has come from being a "really big pile of rotting garbage that had no vegetation—-it was like a moonscape," Komperda said.

Besides the domesticated goats, wildlife such as white-tailed deer and hawks can now be seen on Paxton II and the adjacent Lake Calumet Cluster Sites. Other wildlife includes pheasants, geese, cranes, box turtles, ducks, and seagulls.

Meanwhile, during the Paxton II project, community groups, Illinois EPA, U.S. EPA, and the City of Chicago Department of the Environment, who had been meeting since the mid-1990s, continued to discuss strategies for implementing a wider cleanup that would address the Cluster Sites' problem of a lack of proper capping, potentially allowing the area to be used as open space with very controlled public viewing of birds and other wildlife. The Lake Calumet Cluster Sites Workgroup began with a petition from the Southeast Environmental Task Force to U.S. EPA asking for Superfund monies to address this group of individual but adjacent sites. Their idea was to "cluster" or bundle the sites so as to qualify for the National Priority List (NPL), better known as Superfund.

The Cluster Sites consist of the Alburn Incinerator, U.S. Drum II, Paxton Avenue Lagoons and "Unnamed Parcel." IEPA had supervised surface waste removal and remedial work at adjacent Paxton I Landfill in recent years and at the Paxton Avenue Lagoons over a decade earlier and U.S. EPA had done some toxic waste removals in the 1980s at Alburn Incinerator and both agencies had done prior waste removals at U.S. Drum.

Alburn was probably utilized as a landfill prior to an incineration operation for an assortment of chemicals from 1977-1983. In 1983, an explosion of some drums on the site prompted an emergency removal of some of the materials by U.S. EPA. The U.S. Drum site was used as a dumping area for industrial municipal waste since at least the 1940s and starting in the 1970s was used as an illegal waste transfer and solvent/petroleum recovery facility and a drum storage area. In 1984, U.S. EPA removed more than 1,500 observable drums, 1,750 barrels in berms and 34,000 gallons of liquid waste from the site. The Unnamed Parcel site was used for landfilling operations and also accepted waste from local steel mills.

In 2000, Illinois EPA initiated a significant investigation of the Cluster Sites, including digging 134 test pits and taking 283 samples. It and subsequent investigations have indicated that the Alburn and U.S. Drum sites, for example, still contain wastes at depths of more than 30 feet.

Approximately 400 potentially responsible parties that had sent waste materials to the area were identified and U.S. EPA held negotiations with many of them for more than two years without success on reaching an agreement to fund an acceptable cap for the site. The capping discussions for the 87-acre Cluster Sites were complicated by the daunting cost of bringing in clean fill dirt and other materials to cover the waste areas and collect methane gas emissions. Dealing with the groundwater contamination was also at issue but ultimately deferred to a future remedial action. These efforts continued while the application process for designation as a National Priority List or Superfund site moved forward.

Then in 2006, an unusual opportunity came along to



Soil from the Dan Ryan Project is stockpiled at the Paxton I site for use in the Cluster Sites capping remedy.

move the cleanup forward.. The Illinois Department of Transportation was undertaking a massive reconstruction project on the Dan Ryan Expressway in Chicago and needed to dispose of more than a million cubic yards of soil. Under an intergovernmental agreement proposed by the Illinois EPA's Bureau of Land, IDOT agreed to pay IEPA \$19 a cubic yard to take at least 1 million cubic yards of the soil to the Lake Calumet Cluster Sites area, and will pay the costs of implementing the capping remedy. The soil contains "very tight clay that is suitable for what we want to do and it would have cost us at least \$10 million to buy it," noted Eric Runkel, the Bureau of Land project manager for the Lake Calumet Cluster Sites.

At the same time, the agreement also benefited IDOT and its project cost, since disposing of the soil otherwise could have cost them up to \$70 per ton, Runkel added.

"This is a mutually beneficial effort. IDOT has a convenient place to put large quantities of soil and the Illinois EPA is able to reuse it in an environmentally constructive way," said then IDOT Secretary Tim Martin in an April 2006 statement.

To assure the quality of the soils used in the cap, IDOT sampled in 100-foot grids to assure soil being sent to the Cluster Sites meets IEPA's TACO (Tiered Approach to Corrective Action Objectives) for safe use in residential areas, Runkel said.

Starting in the early spring of 2006, long convoys of trucks from the Dan Ryan project began arriving at the Lake Calumet Cluster Sites, initially stockpiling the soil on the adjacent old Paxton I Landfill site, while site preparation work began on other properties where unauthorized disposal of industrial slag and other waste occurred. Removal of stands of phragmites, some shrubs and small trees was part of the site preparation for use of the "clean fill" soil from IDOT to re-contour the site.

In September 2006, U.S. EPA concurred with Illinois EPA's plan for addressing the soil contamination in the "Cluster Sites." IEPA was also designated the lead agency, following a "Focused Feasibility Study" financed with some of the payment from IDOT that proposed innovative ways of using many of the materials already in the area to reduce the cost of the cap. The plan, or "Record of Decision," includes bio-solids provided from the nearby Metropolitan Water Recovery District facility to be tilled into the topsoil cover and seeded with vegetation; a geotextile layer; a drainage layer with non-reactive material, such as crushed concrete; a low-permeability multi-layer clay cap using the Dan Ryan project soils to prevent further rainwater infiltration; and a gas management layer, using steel slag material in the area at no additional cost. The estimated total cost of the remedy, including engineering and construction, was about \$18.9 million, or essentially identical to the payment being made by IDOT for the Dan Ryan project soil disposal.

By the spring of 2007, more than 800,000 cubic yards of the Dan Ryan soil had already been trucked into the area and construction work was underway on the gas management layer, including installation of 10 trenches for the piping system.

While progress continues on the soil remedy, more intensive investigation continues on the groundwater contamination. Runkel noted that the groundwater is only about 2 1/2 feet below the surface in the area and is inter-

connected with the marshes, with an estimated 1.8 million cubic yards of waste created leachate that is potentially being washed into marshes. He projects it will take at least two more years to complete a feasibility study on a remedy for the groundwater contamination.

Meanwhile, a Lake Calumet Cluster Sites Workgroup continues to meet periodically, and provide input to the project. It includes not only the government agencies, Illinois EPA, which is the designated lead agency, U.S. EPA Region 5, City of Chicago Department of the Environment, the Illinois Department of Natural Resources and the U.S. Fish and Wildlife Service, but also long-term participation by the Southeast Environmental Task Force, led for many years by Marian Byrnes, an unstinting advocate for cleanup of the Cluster Sites, the Calumet Ecological Park Association, the Chicago Legal Clinic, and Northwestern University.

The group has been meeting for more than 10 years and currently is focused on suggesting future uses of the area after the soil and groundwater remediation has been completed, said Mara McGinnis, the Illinois EPA Office of Community Relations Coordinator for the Lake Calumet Cluster Sites.

"Some of the ideas under current discussion include accessibility to bird watchers and nature lovers, such as a nature walking trail along the perimeter of the landfill that would not damage the cover. We're also trying to balance the intent of making this an open space area while not attracting wildlife that would damage the cap (such as burrowing animals)," McGinnis said.

She noted that future use of the area also depends on resolution of potential liability issues and who ultimately will be responsible for maintenance of the cleanup remedies.

### Right-to-Know Legislation Better Informs Illinois Citizens

The Illinois Pollution Control Board has given final approval to regulations proposed by Illinois EPA to implement the landmark "Right to Know" legislation signed into law in July 2005. IEPA worked with citizen groups, environmental organizations and business and industry groups to fashion specific regulations to implement the law so it would meet the goal of providing increased information to citizens potentially impacted by off-site land and groundwater contamination and encourage more rapid cleanup responses, while not imposing an impossible burden on either IEPA or responsible parties.

This act amends the Environmental Protection Act to mandate that the Illinois EPA give timely notification to Illinois citizens about contamination in soil or groundwater that may threaten public health from permitted facilities or other sites where Illinois EPA gains credible scientific data on contamination that is measured or modeled to pose an off-site threat of exposure to the public. In certain circumstances, responsible parties or remedial applicants may be allowed to issue the notice as part of Agency-approved community relations activities. The Act also requires mandatory notification for sites deemed emergencies through certain Illinois EPA and U.S. EPA actions. Illinois EPA assisted in drafting the new law with chief sponsors State Sen. John Cullerton and State Rep. Thomas Holbrook.

In recent years, the Illinois Environmental Protection Agency (Illinois EPA) has become aware of contamination in certain areas of the state that threatens the safety of drinking water supplies that use groundwater sources. Experience from working on multiple sites where commonly used commercial and industrial solvents migrated into the groundwater from soil contamination highlighted the need for early notification to private well owners in the areas of contamination so that individuals can test their water and make important decisions that may impact their families' health. An estimated 400,000 private wells exist in Illinois, many close to larger cities.

An investigation by IEPA, along with the Illinois Department of Public Health and the DuPage County Health Department, in 2002-2004, of contamination linked to a factory and an industrial park that impacted more than a thousand private wells, particularly helped spur passage of the new law. The new regulations adopted by the Pollution Control Board in the fall of 2006 include requirements for identifying drinking water wells in an area of concern and for performing community relations activities to notify and establish communication with the public who may be affected by contamination. Those rules went through two hearings with the Board in the spring of 2006 and were given final approval in September after the Legislature's Joint Committee on Administrative Rules had no objections.

#### **Right-to-Know Notifications**

Meanwhile, notifications to owners of properties that may be affected by contamination from a given site or facility were required as of January 1, 2006, whenever the Illinois EPA determines that soil contamination beyond the boundary of the site where the release occurred poses a threat of exposure to the public above specified cleanup objectives, or groundwater contamination poses a threat of exposure to the public above the Class 1 groundwater quality standards. Illinois EPA will offer the party performing the cleanup an opportunity to make the notification, when appropriate. The Illinois EPA will review and approve the outreach plan and method of notification as well as the notice itself. If the party declines to make the notification, the Agency will do so.

### Screening Process for Sites That May Require Notification

In 2005, Illinois EPA established a Contaminant Evaluation Group (CEG) to systematically review site/facility situations with actual or potential off-site contamination threats that are first identified at the Bureau level. The CEG is comprised of representatives from: the Bureaus of Air, Land, and Water; Division of Legal Counsel; Office of Community Relations; and the Office of Emergency Response. The CEG makes recommendations regarding appropriate actions in response to a release of contaminants, which may include public notices, investigations, administrative orders and enforcement referrals.

The CEG has been meeting monthly and reviewing some referrals via e-mail communications. More than a dozen sites have already been identified where notification by the Agency or a responsible party was deemed necessary. At half of these, the party performing the response action has or will initiate the notification. Additionally, Illinois EPA set up a Right-to-Know web site http://www.epa.state.il.us/community-relations/right-toknow/index.html, and we have recently begun posting a variety of notices that have gone out to citizens on several sites. The "Notification Database" includes, for example, a small-scale incident involving a leak from a pipeline terminal in Macon County, where six neighbors were directly contacted, to the large-scale, highly publicized in the news media, tritium contamination releases involving the Braidwood nuclear power station where extensive community relations activities includes an entire dedicated web site and thousands of nearby residents have been contacted.

### **Pilot Notification Project**

During the summer of 2005, Illinois EPA worked with the Illinois Department of Public Health (IDPH), Cook County Department of Public Health and citizens (who are members of the Right-to-Know Committee) to develop a pilot notification project in South Chicago Heights and Steger. Over 400 private wells are located in the area and are near many industrial sites. The purpose of the notification was to advise that contamination had been detected in the groundwater in the past and to recommend that local well owners have their wells tested for a family of chemicals known as volatile organic compounds (VOCs). Approximately 2200 information packages were sent out, which included a cover letter, fact sheet, a list of laboratories, and sampling instructions (in English and in Spanish). Go to http://www.epa.state.il.us/community-relations/ fact-sheets/south-chicago-wells/index.html to view the fact sheet. Six weeks after the notification was sent, the Agency conducted a follow-up survey with approximately 670 of the residents. Of the ninety-one who responded, 82 percent found the materials in the original mailing "easy to read," 76 percent found the materials "easy to understand," 68 percent found the materials "helpful," and 61 percent indicated that the materials were "timely."

Sixty-nine survey respondents noted whether the materials received were adequate for their needs. Fifty (72 percent) indicated that the materials received provided "just enough" information, while seventeen marked "too little" and two marked "too much."

The responses reinforced the Right-to-Know Committee's efforts at developing an outreach package that will be useful to the public. Copies of the materials developed for the pilot notification are now sent as an example to parties performing response actions when the Agency offers to let them to do the notification to the public.

#### New Well Water Web Site and Outreach Effort

Illinois EPA has also developed a web site to educate private well uses about construction, maintenance, potential contamination problems and testing of their private wells - http://www.epa.state.il.us/well-water/index.html. The site contains links to many useful fact sheets and documents to assist private well owners.

In the fall of 2005, Illinois EPA worked with county health departments around the state to send out news releases announcing the web site and to recommend to private well owners that they test their water for potential contaminants, particularly bacteria, nitrate, volatile organic



Ann Muniz (center) of Downers Grove was honored with the Governor's People off-site properties, are now in place to help Are Today's Heroes (PATH) Award for her outstanding work to increase awareness of threats to groundwater supplies. Mrs. Muniz was a community advocate in responding to widespread contamination of private wells in parts of DuPage County and assisted Illinois EPA in implementing the Right to Know Law that requires increased notification and community outreach when companies cause off-site contamination impacting private wells and other environmental hazards. She was joined by her husband Ed and daughters Alicia and Emily (left) in accepting the award from IEPA Director Doug Scott (right).

ed of newspaper and radio advertisements, an educational web site, and printed brochures. IEPA and IDPH issued a statewide press release on Thursday, November 10, 2005, and invited 51 local health departments that had indicated an interest to do a joint press release. Also, six accredited laboratories offered a discount on well water testing for the month of November. Approximately 61 local health departments and five private labs participated in the campaign.

### **Outreach with State and Local Health Departments**

During May 2006, Illinois EPA staff started outreach to state (regional) and local health departments across northern Illinois by holding back-to-back training sessions in Yorkville (Kendall County) and Rockford (Winnebago County). The objective was to present information about the new legislation and rulemaking and to answer questions about how implementation of these involves a coordinated effort between IEPA and health departments when notifying the public about contamination issues. Both sessions were well attended, helping to create a sense of cooperation among the agencies in working to find ways to best inform citizens regarding the potential for contamination and recommendations about private well testing.

Prior to the new law, the Agency attempted to keep citizens advised about known contamination from certain types of sites where community relations activities were

required or needed based on citizen concerns or interest. Many clean up sites did not fall into these categories, and the responsible party or remedial applicant performed community relations work on their own initiative, if at all.

The new Right-to-Know notification process now being integrated into all IEPA operations will include more types of sites and will notify nearby residents in a timely manner about threats from soil or groundwater contamination. The goal is for citizens to be in a position to make informed decisions to avoid or minimize exposure to contamination from environmental sources.

New Internet Geographic Information System (GIS) tools, combined with an Agency

> evaluation process for screening threats to identify sites where notification is needed.

> The Office of Community Relations has also developed a Right-to-Know General Fact Sheet - "Right-to-Know Legislation Better Informs Illinois Citizens.." View the fact sheet at:

> http://www.epa.state.il.us/community-relations/right-to-know/fact-sheet.html

Another key part of the new law gave IEPA—-for the first time in its 36-year

history-an authority that environmental agencies in many other states already had, to issue "administrative orders" compelling responsible parties to clean up or contain hazardous contaminants released into the environment. Previously, the Agency had to ask the Illinois Attorney General to seek a court order in such cases or refer the matter to the U.S. EPA.

The Agency must still investigate a contaminated site and identify the responsible parties and provide the alleged polluters with an opportunity to reach an agreement to address the contamination and also includes a right to appeal to the Illinois Pollution Control Board based on scientific and legal evidence.

### **IRID** Cleanups Kick Off Under IRID – Illinois Removes Illegal Dumps

Provides First Significant Funding in Agency's History to Address Open Dumps

The Illinois EPA Bureau of Land began implementing the Governor's IRID (Illinois Removes Illegal Dumps) Initiative in September 2006 and by the end of the year contractors hired and supervised by IEPA had cleaned up nearly 40 long-festering open dumping areas in nearly a dozen counties around the state. Locations have ranged from the tip of Southern Illinois near Cave-in-Rock to rural central and eastern Illinois and urban locations in the Chicago metro area, with the material removed ranging from old appliances and construction and demolition debris to derelict cars removed by a winch from a steep hillside. The program and its initial \$3 million appropriation is the first significant resource provided the Agency in its



*Example of illegally-dumped materials cleaned up by IRID.* 

more than 36-year history to address open dumps where the responsible parties can not be located to remove the debris or there is an imminent health and safety threat.

The first cleanup was held in Centreville in St. Clair County and a neighboring resident to the longtime open dumping area was so pleased by the IRID removal that she told a local newspaper that she was "overcome with joy."

In the first three months of the program, more than 9,000 tons of solid waste was taken to regulated landfills, 100 tons of material was salvaged or recycled and 50 tons of tires were collected for recycling or fuel use.

Open dumps can cause disease, fire, accident and sanitation hazards to people and wildlife, as well as being unsightly ongoing magnets to fly dumpers.

IEPA Bureau of Land staffers are also working to pair IRID with other Agency cleanup programs, whenever practical. For example, at a long-abandoned salvage yard in Granite City, IRID will help remove remaining surface waste materials, including such items as boats and appliances, after the Used Tire Unit removed more than 8,000 tires from the site a few years earlier. In addition, an IEPA brownfields grant will then be used to assess subsurface contamination.

"This has been an exciting initiative for both the Agency and the unfortunate neighbors of these illegal dumps and I am grateful to Governor Blagojevich and the Illinois General Assembly for providing additional funding and authority to Illinois EPA to clean up these messes," said Illinois EPA Director Doug Scott.

IRID program staff has worked with the Agency's regional field offices around the state and local officials to identify priority open dumping sites. In addition, several open dumping locations on Illinois Department of Natural Resources sites, in the Jim Edgar Panther Creek State Recreational Area and Buffalo Rock State Park have also been targeted so far.

At one of the IDNR locations, near the I and M Canal, across from LaSalle, the cleanup is somewhat unique because the contractor smashed pieces of concrete dumped there into smaller pieces and removed rebar so it qualifies as "clean construction and demolition debris" and can then be "recycled in place" by being covered up with soil and planted with vegetation. Besides cutting costs, this approach had an additional environmental benefit by functioning like rip rap to reduce soil erosion along a waterside slope.

As well as cleaning up the sites, the IRID program also incorporates an element of prevention and education about illegal open dumping. "No Dumping" signs are placed at every IRID cleanup and, when feasible, cables and barricades are also used to impend future dumping at the sites that have been addressed. Agency staff will also do periodic inspections of cleaned up sites in the future to ensure that open dumping has not resumed.

The program uses part of existing landfill fee revenues received by the state to cover the costs of hiring additional IEPA inspectors and to contract for the cleanups.



Posting a "dumping prohibited" sign as part of an IRID cleanup on Illinois Department of Natural Resources land near Ottawa were (left to right) Jay Endress, assistant to State Sen. Gary Dahl, IEPA Director Doug Scott, IDNR Deputy Director Leslie Sgro, and State Rep. Frank Mautino, D-Spring Valley.

## Governor's Environmental Corps

Illinois EPA Governor's Environmental Corps program gives students a glimpse of working in environmental fields

### Nearly 600 interns since 1991

Thirty-four students from 21 different college campuses participated in the summer 2006 Governor's Environmental Corps (GEC) program that since 1991 has given students a unique professional experience by working with IEPA staff mentors.

The GEC program, which has been funded from the start through donations from Illinois companies that "sponsor" the students, now has 572 alumni, many of whom have gone on to careers in the environmental field, in both the private and governmental sectors.

The majority of selected students were paired with staff mentors in Springfield, where the Illinois EPA's headquarters, organics laboratory and central regional office are located. However, some students were placed in regional offices in Des Plaines, Rockford, Peoria, Champaign, Collinsville and Marion.

Depending on assignment, the work experiences range from testing samples at an Agency lab, to assisting field inspectors in gathering samples or visiting facilities, to helping Agency lawyers draft proposed regulations, to helping set up waste tire collections.

This past summer, for example, GEC intern John DeRosa Jr. worked on alternate fuels and the Clean School Bus program with mentor Darwin Burkhart in the Bureau of Air. Intern Martha Leverenz worked with mentor John Kim in the Division of Legal Council on regulations to reduce mercury emissions from power plants and intern Jacquin Milhouse worked with mentor Elmo Dowd in the Associate Director's Office in working with communities on brownfields and the Governor's River Edge Initiative targeting contaminated riverfront sites.

Meanwhile, GEC intern Terri Walczak assisted her mentor, Deirdre McQuillen (Associate Director's Office) with *Green Pays on Green Days*, the nationally recognized citizen action air pollution awareness program in the Chicago area.

The GEC interns particularly appreciated the practical nature of the summer work experience. "There was a hands on type of work experience in the field nearly every day—whether we were out in the streams collecting samples or going out with a mentor to obtain emission data and observe the area around a meat packing plant, each situation was a learn by doing type of event," commented intern Laura Honigman.

"Whether you graduate with a degree in engineering, business, biology, education, communications, marketing or environmental studies: the IEPA has a place for you. Environmental protection is a broader career path than many perceive it to be—-I enjoyed working side-byside with students or professionals of varying backgrounds," added intern Abby Hahne.

The internship experience for the past several years has begun with a two-day "team-building" retreat at Allerton Park and Retreat Center near Monticello, including the opportunity to climb and jump off tall poles. The internship experience also includes field trips and in Springfield, this past summer, work days to clean up debris and erosion prevent projects for a pond at Washington Park and at Lincoln Memorial Garden on Lake Springfield.

The summer's major two-day field trip in 2006 turned out to be an unexpected adventure for the interns. They were scheduled to visit several facilities in the Metro East area and arrived the morning after one of the biggest storms in history had hit the area, with millions of residents and businesses without power. They also ended up hunkering down in their bus when a second storm hit.

However, the host facilities, including a wastewater treatment plant, an industrial disposal facility, a landfill and an industrial plant were still able to provide tours for the students.

This past summer, several of the interns also participated in a litter pickup in the streets around the Springfield headquarters and also built a special "recycled racecar" from aluminum cans, plastic containers and other recyclable objects, that became the IEPA's award-winning entry in the Illinois State Fair Parade in August.

The internship ended, as it has since the program began, with a gala lunch and "graduation" program at the Executive (Governor's) Mansion in Springfield, with parents and friends invited. One of the highlights of the luncheons for several years has been the premiere showing of a video/DVD of the summer's experiences that the students can take with them.

Applications for the 2007 Governor's Environmental Corps were accepted through March 30, with an estimated 30 slots projected for internships running from June 4 through August 3. This year's interns will receive a salary of \$1400 per month. Students enrolled in any college or university, who will have completed at least their sophomore year prior to start of the program, were eligible to apply.

### GEC interns for 2006 were (name, hometown, college):

- --- Matthew Anderson, Mt. Prospect, Illinois Wesleyan University
- --- Lisa Buettner, Petersburg, University of Illinois at Springfield
- --- Amber Bukowski, Donovan, Eureka College
- --- Matthew Chan, Hong Kong (China), University of Illinois at Urbana-Champaign
- --- Molly Corrigan, Springfield, Southern Illinois University School of Law
- —- John DeRosa Jr., Riverton, Illinois College
- --- Eric Finley, Athens, Grand View College (Des Moines, Iowa)
- --- Abby Hahne, Sheffield, University of Illinois at Urbana-Champaign
- --- Elizabeth Halel, Belleville, Loyola University (New Orleans, La.)
- --- Jennifer Hill, Western Springs, University of Illinois at Urbana-Champaign
- --- Laura Honigman, Rochester, Illinois State University
- --- Samantha Hufnagel, Henry, University of Illinois College of Law
- --- Kang Hui-Clotfelter, Beijing (China), University of Illinois at Springfield
- ---- Jacqueline Jackson, Lansing, Governors State University
- --- Kyle Johnson, Petersburg, University of Illinois at Springfield
- ---- Kyle Kearns, Cary, Southern Illinois University at Carbondale
- --- Lindsay Kelderhouse, Island Lake, Central College
- --- Martha Leverenz, St.Louis, Missouri, Dominican University
- —- Joshua Lochhead, Chester, Eastern Illinois University
- --- James McManus, Jacksonville, Southern Illinois University at Edwardsville
- --- Jacquin Milhouse, Chicago, Davidson College
- --- James Miralgio, Franklin Park, University of Illinois at Urbana-Champaign
- —- Daniel Mosher, Pleasant Plains, Northwestern University
- --- Kiel Peregrin, Springfield, University of Illinois at Springfield
- --- Jennifer Prigge, Rochester, Cornell University
- ---- James Rice, Jacksonville, Illinois State University
- --- William Rinehart, Springfield, University of Illinois at Urbana-Champaign
- —- Jeron Schultz, Springfield, Southern Illinois University at Edwardsville
- --- Rupak Thapaliya, Katmandu (Nepal), Southern Illinois University at Edwardsville
- --- Daniel Urban, Elk Grove Village, Purdue University
- --- Terri Walczak, North Riverside, University of Illinois at Urbana-Champaign
- ---- Ying Wang, Nanyang (China), University of Illinois at Springfield
- --- Kimberly Whitlock, Naperville, University of Illinois at Urbana-Champaign
- —- Tara Wood, Peoria, University of Arkansas



The 2006 Governor's Environmental Corps participants posed at Allerton House near Monticello during their orientation and training session last summer. Thirty-four students from 18 different colleges and universities completed the program in 2006, in which they worked for IEPA staff mentors.



Governor's Environmental Corps interns helped out with erosion control efforts at Springfield's Washington Park during a "work day" last summer.

### Illinois EPA Pollution Prevention Intern Program Helps Illinois Companies and the Environment

Since 1989, nearly 300 Illinois upper-level college and graduate students have spent their summers working with hundreds of Illinois companies on practical pollution-prevention, waste reduction, and energy saving solutions.

With initial training and overall coordination by IEPA, the Pollution Prevention (P2) interns have worked directly for Illinois companies of all sizes and some municipalities to help them save money while benefiting the environment at the same time. The companies pay the salaries of the interns, which will range from \$2,100 to \$2,700 per month for the three-month internships this summer, depending on level of schooling and relocation expenses. Companies participating have ranged from huge multi-national firms, such as Peoria-headquartered Caterpillar that has used P2 interns at several of its Illinois plants, to family-owned companies with less than 100 employees. Through 2006, 282 interns have been placed with 208 companies or facilities, with at least 15 additional interns expected to be placed this summer. Information and pre-screening interviews were conducted by IEPA staff at seven campuses in February (Southern Illinois University at Edwardsville and Carbondale, University of Illinois at Urbana-Champaign and Chicago, Bradley University in Peoria, Illinois Institue of Technology in Chicago and Northern Illinois University in DeKalb.

The students must have at least completed their junior year and be taking classes in an engineering discipline, chemistry, or environmental management. The first week of the summer is spent on an intensive training session in P2 techniques in Springfield and the interns then work fulltime at their host facility on assigned projects.

Richard Reese of the Office of Pollution Prevention in Springfield has coordinated the program for several years and is assisted by Brian Rodely, a P2 staffer based at the Marion regional office.

IEPA began surveying companies in 2001 on their implementation of recommendations from the P2 interns and their cost savings. During the 2001-2004 period, the companies reported a total of \$1.3 million saved in operating and disposal costs, \$420,000 in energy costs, 19 million pounds of solid, special and hazardous waste diverted from landfills and more than 41 million gallons of wastewater that is now recycled rather than discharged.

During 2005, the 20 interns' projects made recommendations with the potential to save the participating facilities more than \$3 million in operating and disposal costs, reducing water consumption by 16.8 million gallons at a savings of \$38,000, and reducing energy costs by more than \$680,000.

Examples of the diversity of the types of projects in summer 2005 include:

Intern Dwarakewswar Penobulu of Bradley University evaluated the use of a biogas as a substitute for natural gas in a new anaerobic digester at the wastewater treatment plant of Aventine Renewable Energy in Pekin, a major ethanol producer. He showed how methane biogas, a byproduct of the digester could be used as a fuel replacement to cut natural gas costs by more than \$900,000 a year. He also proposed a biogas handling system to handle the increased load that could also be used as a backup in the event one of the digesters is down for maintenance. In addition, Penobulu used an ultrasonic detector to identify leaks in the plant's compressed air systems, which could be repaired and save more than \$22,000 a year in energy costs.

Intern Nanda Kishore Boddeda of Northern Illinois University made several recommendations to Nalco Co., a leading provider of water treatment services and chemicals for its Bedford Park plant that produces silica products. Recommendations for a recovery heat exchanger, excess air controller, upgraded boiler burners and a cogeneration system to produce electricity and steam could potentially yield more than \$250,000 a year in savings.

Intern Marci Burt of Southern Illinois University/Carbondale proposed a leak detection and repair plan for Oil Dri, a clay manufacturing facility in Mounds, that is estimated to save more than \$200,000 a year from reducing product loss. She also proposed recycling the clay cooler that exhausts through a bag house into the kiln, reducing energy consumption by 15 percent at an annual savings of \$114,000. Another of her ideas, upgrading the conveyer belt heaters to radian systems, will reduce natural gas usage and save \$90,000 a year.

Intern Syed Jaffrey of Southern Illinois University/Edwrdsville analyzed processes at the Prairie Farms facility in Carbondale that makes cottage cheese and sour cream. He proposed a three-stage reverse osmosis/non filtration membrane system that would generate 38,000 gallons per day of clean water for reuse and generating acid whey for use at hog farms for feed, savings an estimated \$318,000 annually at this one and three other Prairie Farms plants. He also identified several other energy-saving solutions.

Intern Christian Lange of Southern Illinois University/Carbondale worked with the City of DuQuoin, rather than a company, identifying several energy and fuel saving options that also benefit the environment, including purchase of a hybrid electric vehicle, LED units for traffic signals and street lighting and lighting upgrades at the DuQuoin State Fairgrounds owned by the state that could reduce electricity use by more than 223,000 kilowatt-hours and cut carbon emissions by 183 tons. Lange also advised several local businesses on reducing electricity use and saving on power bills.

More recently, summer 2006 intern Eric White of Southern Illinois University/Carbondale was assigned to Big M Manufacturing in Taylorville, a family-owned busi-



Nineteen IEPA Pollution Prevention (P2) interns in the summer of 2006 pose with staff coordinators Rick Reese (left, back row) and Brian Rodely (right, back row).

ness that has been producing corn-burning boilers and furnaces for residential and commercial heating use since 1992, currently supplying products to more than 80 distributors nationally. The company purchased an ammonia water absorption chiller to help the intern investigate different approaches for combining heat-driven cooling technologies with a corn-burning system. The chiller has the ability to produce space cooling from steam, hot water or fossil fuels. White identified four possible designs that would allow the chiller to be driven by a corn boiler that would make the company's products useful in the summer months. It is currently doing additional testing of components of the system.



P2 intern Eric White (left) discusses his project to incorporate an air-conditioning cycle with the corn burning boiler units made by Big M Manufacturing in Taylorville, with owner Melvin Repscher (center) and Brian Rodely of the IEPA Marion Regional Office

### EAP Program Expands Water Education Across Illinois: Small Grants to Teachers Aid in Lake Field Trip Costs

For more than eleven years, the Illinois EPA's Lake Education Assistance Program (LEAP) has provided teachers and not for profit organizations an opportunity to teach water education. They are enabled to do so through small \$500 grants which allow the purchase of lake monitoring equipment, lake related educational materials as well as pay transportation costs to and from the lake being studied. While over 1,000 groups have experienced the program and many have heard and read of the successes, most though may not really know how it all began.

Initially, IEPA staff would regularly pack-up water monitoring equipment and meet teachers and their classes at a lake to discuss watersheds, water quality and how to use monitoring equipment that helps determine the "health" of their lake. During one of these meetings, a teacher remarked how "she had paid for all of her equipment out of her own pocket... and wondered what kind of good could come from an occasional extra \$200 in their budget."

Not long afterwards, as a result of this teacher's statement, the IEPA's Lakes Unit in the Bureau of Water created LEAP. Since that fall of 1995,

### Environmental Progress

the Illinois Environmental Protection Agency has made it possible for teachers across the state to have the equipment necessary for their students to receive a real hands-on education. Besides water monitoring equipment and transportation, teachers have used the grant to attend water related conferences, purchase water related software for their classroom computers, acquire and create educational water materials and even build small ponds on the school grounds. Teachers have also reported that after receiving the LEAP grant and taking their class to the lake, many students decided they would like a



Roxana High School science teacher Pam Abbott (left) with students Sarah Huebner, Ashley Mouldon and Katie LaMarsh, learn to take the flow rate of Indian Creek as they work on a "Total Water Quality Index" using a Vernier Flow Rate Meter, one of the school projects around the state assisted with an IEPA LEAP grant. career dealing with the environment. Each year one class who received a grant is asked to attend the Illinois Lake Management Association's conference as presenters.

Teacher Donna Zvonar's 5<sup>th</sup> grade class from St. Mary's School in Bloomington collected water samples for chemical analysis and bioassessment. They also went out

in boats with GPS units and depth finders to create a 3-D classroom map of the bottom of Miller Park Lake. Claraine Dobos and her high school classes from Bunker Hill have had the unique opportunity to do a comparison study on a newly dug lake with bare shores to a mature lake where plants were well established. Sampling included turbidity, pH, dissolved oxygen, nitrates and iron. Their findings were reported to the Bunker Hill Park Committee.

Susan Miller from the Williamson County Agriculture in the Classroom program used the LEAP grant to help purchase an Enviroscape which will allow teachers and students to understand first hand the importance of watersheds, best management practices and nonpoint source pollution in our water supply. To date, over \$500,000 in grants has been made available.

With the school year beginning and another year of LEAP grants available, it's interesting how one teacher's comment sparked an idea that has grown into what is now the Lake Education Assistance Program.

If you know of anyone interested in applying for a LEAP grant or have more questions about the program contact Steve Kolsto 217/782-3362 or steve.kolsto@epa.state.il.us.

# Robbie Lawrence

### "Littlest Lobbyist" is Also Hero To His Neighbors For Helping Get Better Water

The water from the shallow private well serving his home in the subdivision of Meadow Lawn in Pekin "tasted and smelled bad", as did that of his neighbors, so Robbie Lawerence decided to make it the subject for a story called "Ugly Water" for Mrs. Marj Oesch's second-grade

class at Starke Elementary School.

The story concluded: "It looks bad. It smells like rotten eggs. You don't want to drink it, folks."

It so impressed the class that it became the basis for another project in which the students created "Valentine's Day cards" for Governor Rod Blagojevich, asking for his help in getting better water for Robbie and his neighbors in Meadow Lawn.

Robbie and his grandmother, Sandra Jones, went to Springfield on Feb. 15, 2006, and presented the cards personally to Governor Blagojevich in his Statehouse office. Robbie, then age 8, and dressed in his Cub Scout uniform because he thought it would "look professional," gave a presentation to the Governor and showed him a jar of the murky water. After the meeting, the Governor asked Illinois EPA director Doug Scott to find a solution to the community's water problem. Although the community did not fit into traditional loan or grant programs, a \$120,000 grant was made available to Elm Grove Township through the Environmental Protection Trust Fund, which primarily comes from fines and penalties that come in during the year. The grant allowed the township to run water mains to the homes in Meadow Lawn and connect them to a Pekin municipal water supply line that was 1,200 feet from the subdivision. Illinois American Water Company, which supplies Pekin, also picked up some of the cost to assist the area.

The families in the subdivision, which include homeowners on Social Security or other limited incomes that would otherwise have had a hard time paying for the municipal water connections, now enjoy clear water, without the high iron and manganese content from the private wells that caused the water to often discolor to a dark brown. One of the first things that many of the residents did was go out and buy washers and dryers, which they couldn't use before because the well water would discolor their clothes.

Robbie's grandmother, Sandra Jones, who has previously embarked on a letter-writing and petition campaign to help the subdivision, said she couldn't have been prouder of her grandson. "It's been a great lesson for young people to be unselfish and do good for others—-and we learned about conservation, government and the environment."

Added Robbie's teacher, Mrs. Oesch: "Robbie is a very thoughtful student who is really interested in science and the social sciences and as a result of his crusade for his neighborhood, the entire class learned about government, the environment, persuasive writing and most importantly how to affect their community."

"From clean water to life lessons we've gained so much from the project in general," added Robbie's mother, Lisa Lawrence.

While Robbie became something of a local media celebrity, and was dubbed "The Littlest Lobbyist," he was in the spotlight even more last November 1, when Director Scott came to Starke School to present the Governor's PATH (People are Today's Heroes) Award to Robbie in honor of his efforts to obtain clean water for his subdivision.

"The appeal that he made was a very honest and straightforward one. Robbie did more than most adults do—he went to Springfield and actually made something happen," noted Director Scott.

Noting that Robbie was the youngest PATH Award winner, Director Scott added that: "I know all of the neighbors of Robbie and his mom, Lisa who live along Allentown Road think of Robbie and his classmates as real heroes every time they turn on the tap and get safe public water and no longer have to worry about getting dirty, smelly water or no water."

"I commend Robbie for bringing this to my attention. Robbie is a remarkable example of how much people, no matter what age, can accomplish when they put their minds to it," said Gov. Blagojevich in a statement.

With wisdom beyond his years, Robbie modestly accepted his award, giving credit to "my team—-everyone in this room was part of a team."

Deftly handling TV interviews, the nine-year-old reminded reporters that "people can represent each other and help each other" and smiling, described the water at home now as "the best I ever tasted."

"It's been fun and my mom can now take long showers and it's just overwhelming for me to get the award," Robbie said in another interview.

Later in the day, Robbie and his family were honored again at a dinner put on by their neighbors and other friends.

In January, Robbie and the other Governor's PATH Award winners were invited to be special guests for the Inaugural Ceremony and Ball, joined by his mother and grandmother. In an interview with a reporter for a local newspaper, Robbie noted that all of the state officials being sworn in mentioned the word "service."

Later that evening at the Inaugural Ball, Robbie traded his Cub Scout uniform for a full tuxedo and boutonniere.



Nine-year-old Robbie Lawrence of Pekin was recognized last November 1 as the youngest winner of the Governor's PATH Award for his key role in obtaining a clean water supply for his subdivision.

### Gov. Blagojevich honors Kane County Not-for-Profit with PATH Award

### Award cites organization's environmentally-conscious resale center

Governor Rod R. Blagojevich selected the Mid-Valley Neighborhood Improvement Association (MVNIA), Inc., of Kane County as a recipient of the Peoples Are Today's Heroes (PATH) Award for the organization's committed and environmentally-conscious work that has helped its community save significant amounts of money, primarily through its ReUseIt Center.

"MVNIA is a clear example that organizations are also part of today's heroes. This group has been a great neighbor to the residents of Batavia, Geneva and St. Charles for many years," said Gov. Blagojevich. "MVNIA found a way to be environmental stewards for the hard-working people of their community. They saw a need to recycle and found a way to keep the money in the community. I applaud them for their innovative work."

The Governor's PATH Award recognizes groups or individuals who, through their hard work and commitment, improve the lives of those in their community and help Illinois move forward in the areas of health care, public safety and education.

Illinois EPA Director Doug Scott presented the award on behalf of the Governor. "The Mid-Valley Neighborhood Improvement Association is not just helping the community by providing inexpensive building materials. They are helping the environment by keeping several tons of what would have otherwise been waste out of Illinois landfills," Director Scott said, in making the presentation in Batavia.

"This is exactly the kind of sustainable use approach that we all like to talk about but don't always put into practice. The ReUseIt Center truly does walk the walk and not just talk the talk—more than 72 tons of quality materials have been diverted from local landfills due to its efforts," Director Scott added.

For more than 14 years, MVNIA has assisted low and moderate-income households in the Tri-City area with home repairs and improvements to ensure the continued economic vitality of the whole community. In addition to special, lowrate home improvement loans, MVNIA provides Emergency Home Repair and Resource Assistance to local homeowners to further enhance the area, economically, aesthetically, and socially.

As a demonstration of their continued dedication to being environmentally friendly while helping the community, MVNIA opened the ReUseIt Center, an environmentally friendly, budget-conscious, community-focused retail operation, and the first of its kind in Kane County.

The 8,000 square foot ReUseIt Center is operated by volunteers and two full-time staffers. It provides incredibly lowpriced windows, doors, lighting, cabinets, tiles, vanities, sinks, and much more, in an effort to help residents stretch their home improvement dollars. And a portion of the funds generated by product sales is funneled directly back into the community through MVNIA's Emergency Home Repair Fund. However, because the new and gently used building materials are donated by local businesses and residents, the impact of MVNIA's vision goes well beyond home improvement. The ReUseIt Center has been instrumental in recycling close to 100 tons of quality housing materials and products that would ultimately end up in landfills throughout the state.

"Facilities like the ReUseIt Center help Illinois continue its leadership role in reducing waste and limiting our negative impact on the environment," State Representative Linda Chapa LaVia (D-Aurora) said. "With the rising cost of energy, the need for conservation has never been more apparent, and I am proud to be here today to celebrate this milestone with an important, forward-thinking organization."

Continuing their commitment to the environment, the Center also offers a variety of environmentally friendly classes throughout the year. Some topics covered involve solar energy, environmental issues, green living, prairie gardening, home repair projects and safety. The classes are offered free of charge or for a nominal fee.

"Our organization is truly grateful to Governor Rod Blagojevich and the Illinois EPA for giving us the ultimate recognition on the vital work we do to preserve our environment, while ensuring the economic, social, and aesthetic quality of life in the Tri-Cities," said MVNIA Development Director Barbara Zaha.

"When considering how our organization can further enhance the aesthetics of our community and the overall quality of life in the Tri-Cities, it's only logical to place an emphasis on preserving the natural environment that sustains all of us and everything we do," said ReUseIt Store Manager Bill Coleman.



After announcing the Mid-Valley Neighborhood Improvement Assoc. in Kane County had been honored with a Governor's PATH Award for their ReUseIt Center and other projects benefiting the environment and community, IEPA Director Doug Scott (center) congratulated (left to right), Batavia Mayor Jeffrey Schielke; MVNIA Executive Director Monia Jenkins: MVNIA Board President Cathy Barnard; and State Rep. Linda Chapa La Via.



### ew Laws: Roundup of Recent State Environmental Legislation

New laws to address environmental hazards that were passed by the Illinois General Assembly and signed by Governor Rod Blagojevich as a result of the 2006 General Assembly session included measures to further reduce hazardous mercury sources, to provide additional tools for cleaning up contaminated "brownfields" sites, and restricting "idling" responsible for pollution by large diesel vehicles.

House Bill 5578 (Public Act 94-732) that became effective April 24, 2006, creates the Mercury Switch Removal Act requiring automakers to establish a program to remove and collect mercury switches from discarded vehicles before they are processed as scrap metal. The law establishes a series of phased-in targets for the switch removal and collection, starting with 35 percent by July 2007, 50 percent by July 2008, and 75 percent by July 2009. It also provides for vehicle recyclers and scrap metal dealers to receive \$2 for each mercury light switch removed. Auto makers are required to develop training materials, provide collection containers, arrange for safe disposal and conduct educational outreach to implement the program. The chief sponsors were Rep. Karen May, D-Highland Park and Sen. Terry Link, D-Lake Bluff.

It was among several initiatives supported by Governor Blagojevich targeting mercury, which can cause permanent brain damage and other developmental and nervous system health problems.

"I am pleased that Illinois is the first Midwestern state to address this environmental health hazard. Mercury causes brain damage, especially in children, and passing this bill was a big success," said Rep. May.

"It is imperative that we dispose of these mercury switches in a

safe and secure fashion," said Sen. Link.

The use of auto scrap to make steel is the second largest source of mercury emissions in Illinois, exceeded only by power plants,



The Illinois Statehouse in Springfield

which Governor Blagojevich has proposed be required to reduce mercury by at least 90 percent. Sponsors projected the mercury switch legislation will result in a reduction of about 800 pounds of mercury entering the environment in Illinois.

The Legislature also approved Governor Blagojevich's River Edge Redevelopment Zone Act (**Senate Bill 17 or Public Act 94-1021**), which became effective July 12, 2006.

The legislation provides additional tools and resources to communities on rivers including potential new grants of up to \$2 million, subject to appropriation and a 25 percent tax credit for unreimbursed cleanup costs in excess of \$100,000 per site. It designated Aurora and East St.Louis as the initial pilot communities eligible for River Edge Redevelopment Zones. A trailer bill, **Senate bill 1892 (Public Act 1022)** added Rockford as a third pilot city.

On June 9, Governor Blagojevich signed into law House Bill 4782 (Public Act 94-845), effective July 1, 2006, that prohibits diesel vehicles of more than 8,000 pounds from idling their engines for more than 10 minutes during any 60-minute period, within the state's two largest metropolitan areas: Chicagoland area—Cook, DuPage, Lake, Kane, McHenry, Will counties and Aux Sable and Good Lake Townships in Grundy County and Oswego Township in Kendall County, as well as Madison, St. Clair and Monroe counties in the St.Louis-Metro East area. The new law provides for a petty offense for the first violation, with a fine of \$50, and \$150 for a second or subsequent offense within any 12month period. It provides exemptions when the outdoor air is below 32 degrees or above 80 degrees.

"Clean air is essential to our quality of life here," said Gov. Blagojevich. "I would like to thank Rep. Elaine Nekritz (D-DesPlaines) and Sen. Jeff Schoenberg (D-Evanston) for spearheading this important effort to reduce unhealthy diesel exhaust that leads to poor air quality and contributes to asthma and other respiratory ailments."

The legislation was also strongly supported by several environmental and public health groups. It complements the Governor's Clean School Bus program administered by IEPA, which has developed a video, pamphlets and workshops to reduce pollutants from unnecessary idling by diesel school buses throughout the state.

Prompted by previously unreported releases of water contaminat-

### Environmental Progress

ed by radioactive tritium from three nuclear power plants, Governor Blagojevich also signed a law on June 11, 2006, House Bill 1620 or Public Act 94-849, that requires the owner or operator of any nuclear power plant to report any unpermitted release of any radionuclide into the groundwater, surface water, or soil to the IEPA and the Illinois Emergency Management Agency within 24 hours of the release. It also authorizes and requires the IEPA and IEMA to inspect each of the state's nuclear power plants no less than quarterly each year. "This new reporting requirement will give people the information they

deserve to know about, whether the water they use is safe," said Governor Blagojevich.

Chief sponsors Rep. Careen Gordon, (D-Coal City), and Sen. Gary Dahl, (R-Peru), said the new law will help address concerns of their constituents who lived near the nuclear power plants that had the tritium leaks or discharges. Although the levels of tritium found in the groundwater was relatively low and did not pose a health risk, the contamination was in violation of Illinois' groundwater protection laws.

A portion of the Vehicle Emissions Inspection law was modified by **Senate Bill 2878**  (Public Act 94-848) that was signed and took effect on June 9, 2006. It provides for the Secretary of State to not renew the vehicle registration, rather than the previous provision for suspending driving privileges, of any vehicle owner who fails to comply with emissions testing requirements after several notices. It would preclude a driver from being arrested for a suspended drivers' license for failure to comply with emissions testing. It was sponsored by Rep. Mike Tryon (R-Crystal Lake) and Sen. Martin Sandoval (D-Chicago) who said the enforcement of emissions testing should be aimed at the vehicle rather than the driver.

### **Green Pays on Green Days**

### Record Participation in Fifth Summer of "Green Pays on Green Days" Program To Enlist Citizens in Fight Against Air Pollution

More than 25,000 entries from Chicago metro area citizens pledging to take voluntary actions to help the clean the air were received during the fifth Green Pays on Green Days program during summer 2006, a record number and more than double the 11,000 entries received the previous year.

The national award-winning citizen awareness campaign was started by IEPA and Partners for Clean Air in 2002. The program encourages residents of the metro area to take actions to reduce potential air pollution during summer months, such as taking public transit, carpooling, reducing use of gas lawnmowers and charcoal-fired barbecues and fueling at night.

Promotional events include signups at minor league baseball games, festivals and fairs, and numerous personal appearances by environmental "superhero"—-Breathe Easy Man—a caped crusader for clean air, who is particularly popular with the kids and stars in his own adventure coloring book.

A contest open to residents in Cook, DuPage, Grundy, Kane, Kendall, Lake, McHenry and Will Counties who pledge to do "at least one thing" for cleaner air included a drawing for a grand prize of a new Toyota Prius electric/gas hybrid car donated by Toyota and Chicagoland Toyota Dealers. The remainder of the 44 finalists, chosen at random on days when the area's air quality was forecast to be good or "green", won consolation prizes of Schwinn bicycles. Mary Bonnstetter from Chicago's Rogers Park neighborhood was selected as the Grand Prize winner last September (2006), and said she was "just thrilled to be a part of the program."

The closing event that featured the grand prize drawing, also included Partners for Clean Air Excellence Awards to several Chicago area business for their efforts to reduce air pollution in the region. Recognized in 2006 were Lincoln Park Zoo, Swedish Covenant Hospital, the Regional Transportation Authority and the City of Aurora.

Partners for Clean Air is a voluntary coalition of more than 100 companies, local governments, and other organizations within the Chicago Metro Area that have committed to reduce emissions that may contribute to air pollution, either ozone (smog) or particulates (soot) when weather conditions are also favorable to elevated pollution levels.



Mary Bonnstetter of Chicago was the winner of a new Toyota Prius electric hybrid car last September at the finale of the fifth summer for the Green Pays on Green Days program.

### Annual Air Quality Report: Latest statewide data from IEPA air monitoring network

### Annual Air Quality Report: Trends still show Illinois' air quality well within established standards

Unusual weather early in 2005 affects data for one pollutant

Air quality in Illinois was either good or moderate 90 percent of the time throughout Illinois in 2005,

according to the 35<sup>th</sup> Annual Air Quality Report, released by the Illinois EPA in January.

While this is a decrease from the air quality numbers in 2004, it is consistent with the air quality trends the state has experienced in the past. Air quality trends still show air pollution levels well below the federal air quality standards on a statewide basis.

In 2005, Illinois as well as other Midwestern and Northeastern states experienced one of the most unusual air quality episodes in recent history.



For the first time in Illinois, Air Pollution Action Days were called outside of the ozone season, May through September, with three action days being called in February due to elevated levels of fine particulate matter ( $PM_{2.5}$ ). Scientists determined that a combination of a stagnat-

ing regional air mass and combustion of winter fuels region wide was the main cause of this incident.

This unusual episode provided the Illinois EPA with the opportunity to thoroughly discuss fine particulate matter, which led to additional public education about the causes and health concerns of this pollutant.

"While annual trends show the statewide levels of pollutants well below the federal standards, there are still some areas in Illinois where improvement is needed," said Illinois EPA Director Doug Scott. "The Illinois EPA continues its commitment to improve air quality throughout the state and the region."

The Annual Air Quality Report consists of data collected from a large network of air monitoring equipment throughout the State of Illinois. The Illinois EPA operates and maintains more than 80 air monitoring sites featuring over 200 instruments, which monitor for numerous pollutants, including ozone, particulate matter, sulfur dioxide, nitrogen dioxide, carbon monoxide and lead.

The monitoring network is strategically designed to identify air pollution trends. The data collected are then used to keep the public informed and to identify potential need for change in the Agency's approach to air pollution regulation.

In 2006, the state of Illinois established itself as a national leader in reducing harmful mercury, sulfur dioxide and nitrogen oxide emissions from power plants. These deep reductions will help improve the air quality and protect the health of the people of Illinois for generations to come.

The 2005 Annual Air Quality Report is available on the Illinois EPA web site at <u>www.epa.state.il.us</u>. Printed copies can be requested from the Illinois EPA's Bureau of Air at 217/782-9315.

IEPA Bureau of Air staffer checks air monitoring equipment in the Chicago metro area.

### **Annual Landfill Capacity Report**

### Landfill capacity in Illinois remains high with 19 years of disposal space remaining

### Illinois EPA Annual Report shows expansions of some existing landfills

Disposal capacity available statewide at landfills in Illinois is sufficient for the next 19 years, according to recently released data from the Illinois Environmental Protection Agency contained in the annual Nonhazardous Solid Waste and Landfill Capacity Report. This level is considered very good by national standards.

The remaining landfill capacity is calculated by dividing the volume of wastes disposed during 2005 (52.3 million gate cubic yards) by the capacity remaining on January 1, 2006 (980.4 million gate cubic yards).

This information, along with detailed statistics by region on landscape waste compost facilities, waste transfer stations, waste generation and recycling and solid waste planning efforts are provided in Illinois EPA's 19<sup>th</sup> annual report, "Nonhazardous Solid Waste Management and Landfill Capacity in Illinois," for 2005.

"While there are fewer landfills than there once was, modern sanitary landfills are constructed and operated to meet the strictest standards in history," said Illinois EPA Director Doug Scott. "Illinois EPA also features an efficient and effective method of inspecting these landfills through its regional offices and the delegated inspection program."

The report shows that the overall number of active landfills was 51. One new landfill opened

in Region 3: Indian Creek Landfill #2, in Hopedale. Kankakee RDF, Chebanse, closed in November 2005, and expansions were approved at Lee County Landfill, Dixon, and at Roxana Landfill, Inc., Roxana.

While the number of active landfills in Illinois accepting waste remains good overall, regional capacity estimates vary significantly. Illinois EPA's Region 2, the Chicago Metropolitan region, has about 9 remaining years, with the use of transfer stations allowing much of the solid waste in the Chicago region to be sent to facilities outside the region. This contrasts with Region 7, Southern Illinois, which has a calculated remaining capacity of 51 years.

With the Illinois EPA's delegated inspection program, the Agency partners with local agencies allowing them to conduct inspections of landfills and illegal dumping, on behalf of the Agency.

In addition, the report notes that citizens throughout the state continue recycling efforts to stretch out disposal capacity. Local recycling coordinators in Illinois report that nearly 9.6 million tons of municipal waste was recycled in 2005. Total municipal waste generation rate of 25.3 million tons equates to nearly 38 percent recycling rate in the state, a slight improvement from previous years. Although parts of Illinois are rural and far from recycling markets, many local governments continue their recycling education efforts, and collect recycling data from haulers as a necessary public service.

Additionally, in 2005 there were 102 active transfer stations and 40 active compost facilities

that help manage the waste generated in Illinois.

Only 13 percent of solid wastes deposited in landfills in Illinois in 2005 came from other states, with over 75 percent of that amount generated in Missouri. Although Illinois haulers also transported solid wastes to other states, they are not required to report this to the state of Illinois; therefore, the Illinois EPA cannot provide the volume exported.

Illinois EPA's seven regional offices, 18 delegated counties, the Ambraw Valley Solid Waste Agency and the City of Chicago have been given the authority to inspect landfills, transfer stations and compost sites in their jurisdictions, providing a needed service to the citizens of Illinois.

Additionally, through the Agency's new I-RID (Illinois Removes Illegal Dumps) program, the Regional offices have the added mission of cleaning up illegal dump sites across the state. This program is also charged with shutting down these dumps, and cracking down on violators. In addition, the staff inspects clean construction and demolition debris sites to ensure compliance.

The new report is available for viewing or downloading on the Illinois EPA web site at: http://www.epa.state.il.us/land/land fillcapacity/2005/index.html.

You may also request a printed copy by writing to the

Illinois EPA Waste Reduction and Compliance Section,

P. O. Box 19276, Springfield, IL 62794-9276, or by calling 217-785-8604; or you can send an email request to Ellen.Robinson@Illinois.gov.



Daily cover operations at an Illinois landfill

### Bill Compton Corporate Environmental Stewardship Award Announced by Illinois EPA

Longtime Caterpillar Inc. environmental manager is first honoree

In February, Illinois EPA Director Doug Scott announced creation of the *Bill Compton Corporate Environmental Stewardship Award* to recognize outstanding contributions to the environment by an individual or company, with the award's namesake, retiring Caterpillar Inc. environmental manager Bill Compton, honored as the first recipient during a surprise announcement at a retirement reception for Compton in Springfield.

During his 32 years in Caterpillar's Environmental Affairs Office, Bill Compton has been a leader from the corporate sector, working with Illinois EPA and other stakeholders in developing groundwater protection and air pollution control programs.

"Bill Compton's career has epitomized responsible corporate environmental stewardship and we could think of no one more fitting to honor by establishing this new award and naming it for him. We believe that Bill's environmental stewardship is a model for the Illinois business and corporate community," said Illinois EPA Director Doug Scott in presenting the award to Compton at a retirement reception Thursday, Feb. 15.

"Bill's wealth of professional expertise in chemistry, occupational health, environmental management, and water supplies, his leadership in industrial and professional organizations, and his excellent negotiation skills have made a direct impact on the overall success of Illinois' groundwater and air pollution control programs," Scott added.

"Bill has provided a valuable service as a liaison between the IEPA and Caterpillar facilities, paving the way for positive relationships and win-win results for both groups. His leadership has led to emissions reductions and improvement in our environmental performance and his work to promote environmental stewardship at Caterpillar has been integral to our ongoing inclusion on the Dow Jones Sustainability World Index. Environmental excellence and sustainable development are key to Caterpillar's business success, and we look forward to building on Bill's legacy," said Doug Oberhelman, Group President, Caterpillar Inc.

"At Caterpillar, our people are our greatest asset, and hiring and selecting employees of the highest caliber are critical to our company's success. Bill Compton has demonstrated Caterpillar's values in action: integrity, teamwork, excellence and commitment, throughout his career as an environmental manager. He has embraced, lived and shared the principles of preserving our natural resources with government, business and community alike. On behalf of Caterpillar, I thank the State of Illinois for recognizing Bill's contributions," said Ali Bahaj, Corporate Auditing and Compliance Division Vice President, Caterpillar Inc.

At Caterpillar, headquartered in Peoria, is the large manufacturer of construction and heavy equipment in

the world. Compton was previously awarded an Illinois EPA Environmental Excellence Award for his participation on the design team for the innovative Emissions Reduction Market System to reduce air pollutants that contribute to soot and smog. He also has been a leader from the business sector in groundwater protection efforts, and has served on the Governor's Groundwater Advisory Council since 1997, including as Chair, as well as chairing the Water Quantity Planning Subcommittee and the Right-to-Know Notification Methods Subcommittee.

He has also worked on the local and regional level to protect groundwater, including chairing the Pekin wellhead protection ordinance team, chairing the Central Illinois Groundwater

Protection Planning Committee, and serving as trustee and chairman of the Groveland Township public water supply and on the Tazewell County Groundwater Protection Committee.

His work has been honored with the National Groundwater Association's *Groundwater Hero Award*, the Illinois Groundwater Association's *Groundwater Science Award*, and an Illinois EPA *Certificate of Commendation* for leading the Pekin Wellhead Protection Team.

Compton has also served as Chairman of the Executive Committee



Retiring Caterpillar Inc. environmental manager Bill Compton (right) was recognized in February by IEPA Director Doug Scott (left) with the establishment of a new award for corporate environmental stewardship in his honor.

and Environmental Affairs Committee of the Illinois Environmental Regulatory Group, an industry group representing many major Illinois companies, that focuses on environmental issues.

In his work at Caterpillar, he has addressed environmental issues not just at the company's many Illinois facilities, but has traveled the world consulting on environmental stewardship to the company's international business operations.

### State Fair: Recyclable Racecar wins awards and is a hit with State Fairgoers



Illinois EPA's "Recyclable Racecar" float won the "Director's Award for Best Non-Commercial Entry" in the Illinois State Fair opening parade last August. The "racecar" was constructed primarily by students in the 2006 Governor's Environmental Corps, using aluminum cans, plastic containers and other recyclable items. It also won the "Manager's Award" at the DuQuoin State Fair parade later in the summer.



The Illinois EPA Pavilion in Conservation World at the 2006 Illinois State Fair in Springfield continued the racecar theme with a miniature racecourse popular with younger fairgoers.



A delegation of South Korean Ministry of the Environment officials from the Han River Basin was hosted by Illinois EPA at the National Great Rivers Museum in Alton. Director Doug Scott and Bureau of Water staff members provided an overview of Agency water protection programs and the South Korean delegation shared strategies used in their country. The Han River is the longest river in South Korea so the international professional exchange event appropriately was held on the banks of the longest river in the U.S.—- the Mississippi .



Nick Mahlandt (second from left), veteran Bureau of Water staffer in the Collinsville regional office, talked about the features of the Mississippi River basin in Illinois with members of the South Korean Han River Basin delegation at the National Great Rivers Museum in Alton.

### **Korean Visit:**

South Korean Ministry of the Environment officials exchange views with IEPA staff on water protection stratigies

### **Brownfields:**

Galesburg, Granite City, Broadview and Blue Island receive IEPA grants to help clean up contaminated sites for redevelopment



IEPA Director Doug Scott signs a ceremonial Big Check for a \$70,600 brownfields grant to the City of Galesburg for continued environmental cleanup at the former Paintcraft Corp. site, as (center) Mayor Gary Smith looks on and City Development Director Roy Parkin holds the Big Checkbook.



Interior of a building at the long-abandoned Paintcraft factory being addressed with the help of the IEPA brownfields grant. The factory operated from 1927 until 1990 and the City of Galesburg is now cleaning up the site for potential redevelopment.



*Illinois EPA combined three of its programs* to assist Granite City in cleaning up a former salvage yard. A \$42,505 Municipal Brownfields Redevelopment Grant is being used for subsurface contamination environmental investigation while an IRID cleanup removed a wide variety of surface debris and other abandoned items, including boats, on the site. The Agency's Used Tire Unit previously removed more than 8,000 tires left on the site. In the photo, Granite City Mayor Ed Hagnauer (center) displayed a ceremonial Big Check for the grant. He was joined by (left to right), State Rep. Jay Hoffman, D-Collinsville, State Rep. Tom Holbrook, D-Belleville, State Sen. Bill Haine, D-Alton, and State Rep. Dan Beiser, D-Alton.



IEPA Director Doug Scott (left) signs a ceremonial Big Check for a \$300,000 Brownfields Stipulated Grant to the Village of Broadview as Mayor Henry Vicenik and State Rep. Karen Yarbrough, D-Maywood, look on. The grant will finance completion of the environmental cleanup of the former Broadview Quick Wash cleaners site. IEPA previously provided \$240,000 in Municipal Brownfields Redevelopment Grants for the site that is slated for redevelopment with condominium residences and retail space.



(Left to right) Blue Island Mayor Donald Peloquin, IEPA Director Doug Scott, Blue Island Economic Development Commission Chair Jack Heuser and David Chandler of the Center for Neighborhood Technologies, celebrated an IEPA brownfields grant of \$119,977 for environmental investigation at a 90-acre former industrial and commercial site.

### **Clean School Bus:**

Effingham and Taylorville join Clean Bus Program



The Taylorville School District and its transportation contractor, Beck Bus, is also one of the newer participants in the Governor's Clean School Bus Program, using its grant to retrofit 30 buses with diesel oxidation catalysts. Taylorville students joined (back row, left to right) High School Principal Thomas Campbell; Mary Pat Tyson of U.S. EPA Region 5; Susan Tapp, district traffic manager for Beck Bus; State Rep. Gary Hannig, D-Litchfield; Bill Beck, owner of Beck Bus; State Sen. Deanna Demuzio. D-Carlinville; Taylorville Mayor Frank Mathon; Taylorville Schools Superintendent Dr. Gregg Furstenau; and IEPA Director Doug Scott.



The Effingham School District was recognized by IEPA Director Doug Scott (left) for its participation in the Clean School Bus Program. The district used its grant to install particulate filters and use ultra low-sulfur diesel fuel to reduce emissions by 90 percent for 26 buses. He was joined by (left to right) Superintendent Dan Clasby, Director of Business and Administration Dean Keller, and High School Principal Mike McCollum. So far, 69 school districts have participated in the program, with tailpipe emissions reduced from nearly 2,600 diesel school buses. That includes more than 660 retrofitted with diesel oxidation catalysts, 102 with particulate filters, 350 with idling equipment, 256 with early phase-in of ultra low-sulfur diesel fuel use and 1,854 using B20 biodiesel

### **Drinking Water Infrastructure Loans:**

Litchfield, Geneva and Sycamore get IEPA low-interest loans to upgrade or expand drinking water treatment facilities.



The City of Litchfield is using a \$12.75 million low-interest loan from IEPA to construct its new drinking water treatment plant, replacing an antiquated 1925 facility. IEPA Director Doug Scott (right) joined (left to right) State Sen. Deanna Demuzio, D-Carlinville, State Rep. Gary Hannig, D-Litchfield, and Litchfield Mayor Tom Jones for a ceremonial check presentation.



A \$6 million low-interest Drinking Water Infrastructure loan from IEPA will enable Geneva to expand it's treatment facilities and remove naturally-occuring radium that exceeds new drinking water standards, as well as other water quality improvements, part of a multi-year project in which IEPA will provide \$27.5 million in total financing. Participating in a Big Checkbook presentation was (left to right) IEPA Director Doug Scott, State Sen. Chris Lauzen, R-Aurora, Geneva Mayor Kevin Burns, and State Rep. Timothy Schmitz, R- Batavia.



IEPA is providing a \$1.02 million lowinterest Drinking Water Infrastracture Revolving Fund Loan to Sycamore to finance radium treatment in the Sycamore public water supply. (Left to right) State Rep. Robert Pritchard, R-Hinckley, IEPA Director Doug Scott, Sycamore Mayor Ken Mundy, and State Sen. J. Bradley Burzynski, R-Clare, celebrated financing for the project that will bring Sycamore in compliance with the federal radium standard.

### **Wastewater Infrastructure Loans:**

Evanston and Rockford area get IEPA low-interest loans to upgrade sewers and wastewater treatment plants.



Evanston Mayor Lorraine Morton (right) and State Rep. Juilie Hamos, D-Evanston, hold the "Big Checkbook" for Director Doug Scott to recognize an IEPA Wastewater Infrastructure Revolving Loan for more than \$11.3 million to continue upgrades on the city's combined sewers to reduce basement backups and street overflows during heavy rains. IEPA has provided more than \$150 million in loans over 15 years to Evanston for a massive upgrading of its combined sewer system.



IEPA is providing a \$2 million Wastewater Infrastructure Revolving Loan to the Rock River Water Reclamation District, for replacement of a pump station and force main to serve additional homes in the Rockford area. (Left) Winnebago County Board Chairman Scott Christianson and Reclamation District Chairman Kent Logan joined IEPA Director Scott in announcing the loan completion.

### Youth and the Environment



Several of the "Top Twelve" winners in the 20<sup>th</sup> Annual Illinois EPA Poster, Poetry and Prose contest for 5<sup>th</sup> and 6<sup>th</sup> grade students, joined IEPA Director Doug Scott at an awards ceremony in April. The contest is coordinated with the Agency's environmental education guide, and this year's contest focused on litter prevention, waste reduction and recycling with "This Land is Our Land--Don't Spoil our Soil" as the theme. The young artists and writers were joined by families and teachers at the Springfield reception where they received ribbons and certificates, U.S. Savings Bonds, and environmental reference books for their schools. The Top 12 entries are featured on the IEPA's web site and were on display at the Springfield headquarters. The Top Six written entries were submitted by Vaniya Agrawal from Lisle Junior High School, Julia Condotti from St. Cletus Catholic School in Burr Ridge, Ruth Emmett Kahn from Countryside School in Urbana, Carmen Savage from A-C Central Junior High in Ashland, Stephen Sullivan from Avery Coonley School in Western Springs, and Riley Williams from Herbert Hoover School in Schaumburg. The Top Six posters were submitted by Luke Brotherton from Kingsley Junior High School in Bloomington, Meagan Louise Finucane from St. Cletus Catholic School in LaGrange, Megan Helms from Tri-Valley Middle School in Downs, Dailea Powell from Edison School in Macomb, Vincent Rinaolo from East Lake Academy in Lake Forest, and Zeke Snell from New Simpson Hill in Vienna.



Tayler McGillis of Toluca (right, being congratulated by IEPA Director Doug Scott) was one of four 2007 "Governor's Green Youth Awards" winners recognized at a ceremony in May at the Executive Mansion in Springfield. Tayler built and maintains a bluebird trail at a local park. Others recognized were Keith Country Day School in Rockford for a project to increase the usage of compact fluorescent lights, solar panel installation, research on a green roof, as well as other energy awareness activities; Rhodes School District in River Grove for its extensive recycling and waste reduction and energy conservation projects; and Robert H. Richmond III of Lockport for a project to reduce the amount of surplus monofilament line improperly discarded by fishermen. Travis Hansen of Dundee Crown High School in Carpentersville was one of four students chosen for an IEPA Environmental Excellence Award in the Senior Division at the State Science Fair Exposition in Champaign in May, for his project on solar design. Also recognized were Cameron Hitchcock of Farnsworth School in Chicago for "Know Your Enemy", Natalie Romano of Resurrection High School in Chicago for "Oil....A Dangerous Enemy,", and Steven Michael Blair of Unity Point School in Carbondale for "Corn Waste: Is It a Viable Substitute for Commercially Available Packing Materials." This year more than 1,000 students entered the Science Fair Exposition and about 100 projects focused on environmental issues and met the criteria for the IEPA special award. The "Outstanding Achievement" winning students received a \$100 U.S. Savings Bond, a plaque and certificate.





Fourth graders at the annual Earth Stewardship Day at Watershed Park on the State Fairgrounds in Springfield on May 1 got up close and personal with a flathead catfish held by Dan Stevenson with Illinois Department of Natural Resources Fisheries as (back, left to right), IEPA director Doug Scott, Illinois Department of Agriculture Director Chuck Hartke and State

Treasurer Alexi Giannoulias look on. More than 1,000 Sangamon County fourth graders participated in the 16<sup>th</sup> annual event, which included 41 interactive presentations on the importance of protecting, restoring, recycling and reusing natural resources. IEPA employees staffed seven of the stations, including the popular "Environmental Jeopardy" game in which student volunteers compete against the clock and each other to correctly answer various environmental questions. The Illinois Departments of Agriculture, Commerce and Economic Opportunity, Natural Resources, and Transportation also participated, as well as the Association of Illinois Soil and Water Conservation Districts and the City of Springfield. In keeping with the focus on stewardship, students and teachers were asked to make sure lunches and beverages were "waste-free."



Parade of trucks carries excavated soil from the Illinois Department of Transportation's Dan Ryan Expressway Reconstruction Project for use in capping the Lake Calumet Cluster Sites.

Environmental	
Prog	ress

Illinois Environmental Protection Agency Box 19276 Springfield, IL 62794-9276 PRSRT STD U. S. POSTAGE PAID SPRINGFIELD, IL PERMIT NO. 704

www.epa.state.il.us

Address Service Requested



Printed on recycled paper Printed by Authority of the State of Illinois, June 2007 • 8350 IISG07-1091

S GRAPHICS