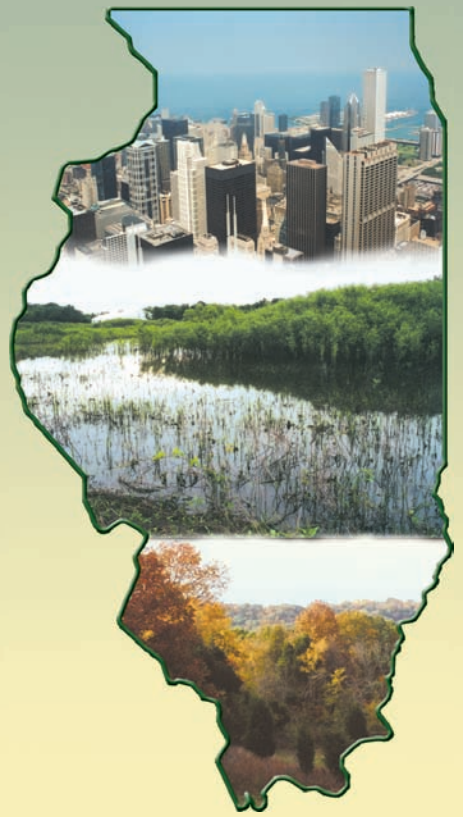
State of Illinois
Illinois Environmental Protection Agency
Douglas P. Scott, Director

# *To Provide and Maintain a Healthful Environment*



# Biennial Report 2007 - 2008

## DECEMBER 2009

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## ARTICLE XI-ENVIRONMENT

### Section 1: PUBLIC POLICY-LEGISLATIVE RESPONSIBILITY

The public policy of the State and the duty of each person is to provide and maintain a healthful environment for the benefit of this and future generations. The General Assembly shall provide by law for the implementation and enforcement of this public policy.

### Section 2: RIGHTS OF INDIVIDUALS

Each person has the right to a healthful environment. Each person may enforce this right against any party, government or private, through appropriate legal proceedings subject to reasonable limitation and regulation as the General Assembly may provide by law.

*— From the Constitution of the State of Illinois /Ratified Dec. 15, 1970*

***"By thy rivers gently flowing,***
***Illinois, Illinois***

***O'er thy prairies verdant growing,***
***Illinois, Illinois***

***Comes an echo on the breeze."***

*— From "Illinois" (Official State Song) written by C. H. Chamberlain*

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## Illinois Environmental Protection Agency

## BIENNIAL REPORT 2007 - 2008

### DECEMBER 2007

**State of Illinois**
**Environmental Protection Agency**
Office of the Director
Springfield, Illinois

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# MESSAGE FROM THE DIRECTOR

This is the third Biennial Report from Illinois EPA, providing an overview of the Agency's work during 2007 and 2008. It highlights the ongoing progress being made in our state to protect our air, land and water resources, as well as continuing efforts to involve communities, make environmental information more accessible to citizens, and encourage everyone to take responsibility for good environmental practices. The dedicated staff of professionals at Illinois EPA relies on cooperation and partnerships with the regulated community, local governments, citizen organizations and others to carry out our mission. Since 1970 the Illinois Environmental Protection Agency has implemented and administered major state and federal environmental laws and regulations that have helped result in significant improvements in the quality of our air, land, and water and protection of public health and that work continued in 2007 and 2008, with additional accomplishments reflected in this report.

Outdoor air quality has improved significantly and most recently we have met one set of federal standards for ozone and fine particulates in the Chicagoland and Metro East areas while we work on new strategies to meet even more stringent ones that are going into effect. Air quality monitoring data continues to show progress---during 2007 outdoor air quality in Illinois was either good or moderate more than 93 percent of the time and more than 96 percent of the time in 2008. This report includes details on changes in the emission testing program in the Chicagoland and Metro East areas implemented in April 2008 that provide greater convenience to vehicle owners while reducing costs to the state and preserving emission reductions. Other programs of Illinois EPA to reduce "mobile source" air pollutants, such as diesel emission and alternate fuel reduction, are also detailed in the report.

While overall air quality in Illinois has steadily improved in the past three decades, the Illinois EPA has taken additional steps forward in addressing mercury and other pollutants from coal-fired power plants and reducing greenhouse gases that contribute to global warming.

In July 2008, Illinois coal-fired power plants began to install and operate mercury emission controls to comply with the Illinois Mercury Rule adopted by the Illinois Pollution Control Board at the request of the Illinois EPA that became effective in December 2007. Widely recognized as ground-breaking and one of the most stringent in the country, it requires pollution controls capable of achieving a 90 percent reduction in mercury emitted from power plants. Agreements reached with the power companies on mercury reductions also require reductions in nitrogen oxides and sulfur dioxide that go beyond federal requirements.

Illinois also began establishing its leadership among the states during 2007-2008 on the issue of climate change, which many believe to be the great environmental challenge of our time. Illinois was only the second state to join the Chicago Climate Exchange and agree to reduce greenhouse gas emissions and has been active in creation of the national Climate Registry, and in the implementation of the Midwest Greenhouse Gas Reduction Accord. The Illinois Climate Change Initiative was one of the first in the nation to enlist farmers and other landowners in programs such as conservation tillage, use of methane digesters and reforestation to reduce greenhouse gas emissions in exchange for the selling of credits on the Chicago Climate Exchange and there has been a strong response across the state. The Illinois Climate Change Advisory Group, composed of a broad range of representatives from business, labor, government, academia, environmental organizations, local governments and others, met extensively during 2007 and with the assistance of leading energy and environmental consulting firms recommended 24 diverse strategies that would meet a goal of reducing greenhouse gas emissions in Illinois to 1990 levels by 2020. The site cleanup programs administered by Illinois EPA to remove historic contamination from old industrial and commercial sites have been among the largest and most successful in the nation. During IEPA began refining our cleanup program to emphasize more sustainable and green practices for these

remediation projects. Case studies of some major cleanup projects in 2007 and 2008 are included in this report.

In the fall of 2006, the first cleanups of illegal open dumps under the new IRID or Illinois Removes Illegal Dumps program began, and by the end of 2008 more than 200 had been completed. IRID is the first significant funding the Agency has received in its history to address these long-festering open dumps and the program was extremely popular with both local citizens and local officials who helped us identify and prioritize sites for cleanup as well as taking steps, such as signage and increased police patrols, to prevent future open dumping at these locations.

The Agency's Bureau of Land's hazardous and solid waste management programs have been successful in cleaning up thousands of acres of land throughout Illinois and reducing the amount of waste disposed of in Illinois landfills. In 2008, the Bureau of Land helped pass one of the most comprehensive state electronic waste (e-waste) recycling laws in the nation. As the lead agency, the Illinois EPA will implement a system by which manufacturers of computers, televisions and printers will partner with local governments, recyclers, refurbishers and others to develop alternatives to landfill disposal.

Also in 2008, the Illinois EPA began conducting pilot pharmaceutical collections in 25 counties in partnership with local governments, pharmacies and others to prevent unwanted medications from getting into water bodies. The Illinois EPA also organized a statewide Summit Conference in October 2008 attended by more than 100 representatives from a broad range of organizations and an ongoing Medication Education Disposal Solutions Committee was launched as a result to create collaborative coalitions to expand pharmaceutical collection and education programs. Illinois EPA also was one of the first state agencies in the nation in 2008 to sample public water supplies for several pharmaceutical-related chemicals and while only trace amounts of some of them were found, follow-up monitoring will continue.

Particularly since the passage of landmark "Right to Know" legislation in 2005, IEPA has also been working diligently on expanding outreach to citizens impacted by off-site contamination from industrial and other sources. Those responsible for the contamination now have a greater legal obligation to not only inform their neighbors of any impact but to put in place community relations plans under IEPA oversight. IEPA has also greatly expanded the amount of interactive environmental information available through the Internet, such as information on drinking water supplies, cleanup sites and enforcement cases and that effort continued in 2007-2008.

*"Each of us has the responsibility to protect the environment – not just for our quality of life today, but for the generations to come.*

**Douglas P. Scott,**
*Director, IEPA*

The Agency's Bureau of Water continued in 2007-2008 to ensure that Illinois' rivers, streams and lakes will support all uses for which they are designated including protection of aquatic life, recreation and drinking water supplies, including regulating public water supplies to make sure they provide water that is consistently safe to drink, and protect Illinois' groundwater resources for designated drinking water and other beneficial uses. The Bureau administers thousands of permits under the National Pollutant Discharge Elimination System (NPDES) and also oversees operation of community water supplies and wastewater treatment plants.

The Bureau of Water also administers the low-interest revolving loan infrastructure program, which continues to be a key component for communities across the state being able to move forward on upgrading or expanding wastewater and drinking water treatment plants and collection and distribution facilities. The Bureau also helps protect water resources through administering federally-funded non-source pollution prevention grant projects to reduce runoff and erosion and through education programs, such as volunteer lake monitoring and lake festivals and grants and workshops for teachers and students. Statistics and more information on the loan and grant projects are contained in this report.

Illinois EPA's Office of Emergency Response is responsible for responding to environmental emergencies such as spills or sudden accidental release of hazardous substances throughout the state. This Office also serves on the Illinois Terrorism Task Force. Statistics and examples of incident responses in 2007-2008 are highlighted in this report.

The Agency's Office of Environmental Policy & Outreach works with citizens, public interest groups, and industry to improve the efficiency and effectiveness of environmental programs at the Illinois EPA. Through agricultural policy and advisory, local government initiatives, community relations outreach, and educational programs, this Office promotes public awareness of environmental issues that impact the health and welfare of Illinois citizens. It is also responsible for ensuring that environmental justice (EJ) outreach activities are integrated into the permitting and regulatory processes and in 2008 representatives from several citizen groups attended a statewide conference on environmental justice and the agency's official EJ policy was finalized. Environmental Policy and Outreach also continued during 2007-2008 to coordinate IEPA's diverse environmental education programs, including the "Environmental Pathways" curriculum packet and associated Poster, Poetry and Prose Contest, the Green Youth Awards, Earth Stewardship Day and the state Science Fair. The Office of Pollution Prevention continued its assistance to local agencies and industry to promote pollution prevention as the preferred strategy for environmental protection and for reducing waste and also took a leadership role in implementing "green" initiatives in state government. The Office of Community Relations continued to be a key component of the Agency's outreach efforts in 2007-2008, ensuring that citizens were aware of potential environmental impacts and had input into permit decisions through public hearings and information sessions. Some of the examples of the work of this Office in 2007-2008 are included in this report as well.

Illinois EPA's Division of Legal Counsel is responsible for the development and coordination of formal enforcement cases with the Illinois Attorney General and State's Attorneys. The Division also helps develop legislative and regulatory proposals and provides legal advice to management and staff. Statistics and summaries of some major enforcement cases for 2007-2008 can also be found in this report.

In conclusion, I hope you find this report of interest and if you have any suggestions or ideas on how can make our programs better, please contact us. When it comes to protecting the environment, it is not just the responsibility of government regulatory agencies, but all of us.

# PUBLIC OUTREACH AND CITIZEN INVOLVEMENT

## *Office of Community Relations: 2007-2008 Project Activities*

The Office of Community Relations (OCR) coordinated public hearings, informational meetings, sampling access agreements, and distribution of fact sheets and other site specific materials at locations throughout Illinois during 2007-2008. Whether it involved permit applications or the status and potential hazards from contamination, OCR community relations coordinators continued to provide a crucial link between the Agency and the public, as well as local agencies, such as county health departments.

Among the numerous sites to which OCR staff were assigned in 2007-2008 were the remedial work on tritium releases from the Braidwoood nuclear generating facility, groundwater contamination investigations in DuPage and McHenry Counties, methane release complaints for Mallard Lake Landfill in DuPage County, solvent contamination in groundwater in the Fox Lake (Lake County) area, and ongoing remediation work at the former Indian/Texaco refinery in Lawrenceville.

Others included the ASARCO-Taylor Springs removal actions involving excavation and restoration in 2007-2008 of 36 properties impacted by lead contamination; a site investigation and screening of nearby residential yards near the former Abingdon Pottery Co. in Abingdon (Knox County) in 2007; keeping nearby residents aware of additional gas vents and other controls implemented in 2008 at the MIG DeWane, Countryside and Land Comp landfills to address odor complaints. Community Relations also provided fact sheets and other communications to citizens on the Bell Fuels site in (x) and landscape waste compost facilities.

OCR also coordinated community relations and assisted with preparing responses to questions raised at hearings and in written comments for air pollution control and water discharge permits for a major refinery expansion, proposed new ethanol plants and power plants, as well as the first carbon dioxide sequestration project in Illinois permitted in 2008. Community relations staff also continued to coordinate public involvement in the ongoing cleanups of old manufactured gas plant sites around the state and ongoing remediation at National Priority List (Superfund) sites, including Johns-Manville and Outboard Marine in Waukegan, as well as on federal led cleanup sites, such as former military facilities like the Chanute Air Force Base in Rantoul.

The Office of Community Relations also represented the Agency on addressing remaining issues for the Waukegan Harbor Area of Concern on Lake Michigan, and helping coordinate public meetings and outreach for watershed plans, such as for the Waukegan River and Aux Sable Creek.

## Illinois EPA Environmental Education

The Agency's 21st Annual Poster, Poetry and Prose Awards Ceremony was held on Saturday, April 5, 2008 at the Hall of Flags and Auditorium in the Howlett Building. The contest is held in coordination with distribution of the Agency's Environmental Pathways study material to classrooms across the state. Forty-five statewide finalists, along with ten out of twelve of the top winners were able to attend the ceremony for refreshments and tours of the Illinois State Capitol and the Illinois State Museum with their families. Twelve teachers were also able to join the awards ceremony. Director Scott presented a certificate and ribbon to all of the finalists; and the top winners received a $50 U.S. Savings Bond, a rosette, certificate and an environmental reference book for their school library. The awards ceremony also included an additional award to twelve students; an Honorable Mention medal in recognition of creativity, time and effort, and artistic skills. This year's theme was "Global Warming – What Can We Do?"

The 17th annual Earth Stewardship Day was held on Tuesday, May 6, 2008 at Lincoln Park in Springfield. Over 750 Sangamon County

fourth graders attended this event to learn about the importance of protecting, restoring, recycling and reusing natural resources. A total of 29 interactive presentations and special attractions were scattered throughout the park. The various presenters represented a wide range of agencies and organizations, all focusing on the importance of protecting, restoring, recycling and reusing natural resources. Five stations were staffed by the Illinois EPA, which included "Environmental Jeopardy," "Macroinvertebrate Mayhem," "Recycle Dash," "Toxic Relay," and "Groundwater Model." Special presentations were offered by Brian "Fox" Ellis, of Fox Tales International and Dan Keding of DanTales, Urbana. These environmental storytellers are known nationally. Grant Middle School's 7th grade IMSA students also presented their "Global Warming" project, and the Wildlife Prairie Park presented their live animals with the "Illinois Birds of Prey."

The Illinois Environmental Protection Agency, the Illinois Departments of Agriculture, Commerce and Economic Opportunity, Natural Resources, and Transportation, as well as the Association of Illinois Soil and Water Conservation Districts, the city of Springfield and the Illinois State Treasurers Office jointly sponsored this year's event.

IEPA staff organized and judged the Illinois Junior Academy of Science State Exposition as a Special Awards Sponsor in Champaign on Saturday, May 3, 2008 to select four projects for an Illinois EPA Environmental Excellence Award. Over 1,000 Illinois students entered a project in this year's science fair. The judges started out with over 130 projects that encompassed an environmental awareness. The awards given were broken into two categories; a junior (7th and 8th grade) and a senior (9th – 12th grade) division. Winners were chosen from each category to receive an Outstanding Achievement, which consists of a $100 U.S. Savings Bond, plaque and certificate, and a


*2008 poster.*

Second Place Recognition, which includes a $50 U.S. Savings Bond, a plaque and certificate.

Quarterly editions of the Citizens' Bulleting were created, compiled and distributed to the list of registered e-mails. They were also posted on the Agency web site.

Dive In! was held on October 22, 2008 at the Peace of Earth Environmental Learning Center in Rushville. Dive In! is a day of water education for students and is celebrated with interactive water related presentations. Local 4th and 5th grade students explores a diversity of water related topics including watersheds, geology and water quality. This event is funded by the BOW and will be moving around the state.

Agency staff held five different presentation stations at Glenwood Intermediate School in Chatham on May 14, 2008. Over 300 fourth graders rotated through the following stations: Environmental Jeopardy, Recycle Dash, Toxic Relay, the Long Haul and Monitoring Water Quality. The event was initially to be held outdoors. However, because of inclement weather, everything was held indoors. This was the second year that the Agency held this event at the school to help the students learn about the importance of protecting, restoring, recycling and reusing natural resources.

Agency staff presented at the three-day Conservation Fair 2008 held at the DuQuoin State Fairgrounds September 30 through October 2, 2008. This event was open to students from kindergarten through sixth grade, and hosted by Jackson, Williamson, Perry, Washington, Randolph and Franklin Counties. Over 1,600 students were able to learn about the environment and its valuable natural resources.

IEPA staff also made presentations at the four-day 2008 Stewardship Week that was held at the Western Illinois Youth Camp at Lake Jacksonville September 25-26 and October 2-3. Around 1200 first through sixth grade students from six different counties (Greene, Morgan, Macoupin, Cass, Pike and Sangamon) attended this event. They were able to learn about their environment and ways to protect it with hands-on activities.

In addition, Illinois EPA continued to conduct workshops for teachers on environmental education issues in 2007-2008.

## Office of Pollution Prevention: 2007-2008

### *Pollution Prevention Internships*

In the summers of 2007 and 2008, Illinois EPA's Office of Pollution Prevention trained and placed 32 student interns in the field to work on pollution prevention projects at industrial, educational and local government facilities across the state. The students were recruited primarily from engineering and chemistry programs at state universities. The interns worked on projects to reduce waste, save energy and minimize releases to the environment. The projects varied widely, but each was designed to help facilities save money and improve efficiency. Taken together, the intern projects have the potential to:

- Reduce energy costs by over $3.7 million;
- Save over $1.6 million in lower operating and disposal costs;
- Divert over 2,500 pounds of waste material from landfills;
- Curb greenhouse gas emissions by 916 tons.

### *Mercury Switch Removal*

The Illinois Mercury Switch Removal Act became law April 24, 2006. Under the law, automakers were required to develop a statewide program to collect mercury-containing switches from end-of-life vehicles before they are shredded and crushed for recycling. The mercury switches can be found in trunk and hood lights, as well as anti-lock brake systems of certain older vehicles. In 2007, 11 recyclers submitted 15,450 switches or a total of 33.99 pounds of mercury for recycling. The switch removal program was voluntary in nature during the first year of operation. In September 2008, two important changes were made in the program because a 50 percent collection target was not achieved. Automakers were required to pay vehicle recyclers, crushers and scrap metal processors a removal incentive of two dollars for every mercury switch removed. In addition, all mercury switches from end-of-life or scrap vehicles were required to be removed before the vehicle is processed as scrap metal, unless the switch is inaccessible due to significant damage to the vehicle. With the incentive program, more switches were collected in the last half of 2008 than in all of 2007. Fifty-five (55) auto recyclers removed 32,364 mercury switches or 70.98 pounds of mercury from end-of-life vehicles in 2008.

## Agricultural and Rural Affairs: 2007-2008 Activities

The Agency's Agricultural and Rural Affairs Advisor, Richard Breckenridge, worked on a variety of environmental activities that particularly impact the agricultural and rural sector of Illinois in 2007-2008, including issues related to ethanol production, greenhouse gas reduction and livestock production.

The Advisor was one of the coordinators of the Illinois Conservation Climate Initiative, which, in 2008, passed the $1 million dollar amount in payments to Illinois landowners for using conservation practices that help offset greenhouse gas emissions, as well as facilitating a methane production and digester study on a large swine production facility in Southern Illinois.

Other activities included helping start, along with Associate Director Elmo Dowd, an outreach to the 15 smallest counties in the state, with populations under 10,000, and working with both state university and agribusiness and livestock and commodity groups on environmental polices impacting

agriculture, as well as special outreach to the dairy industry in northwestern Illinois on agency inspections.

Involvement in the ethanol industry included facilitating a study with the Waste Management and Research Center on best management practices to reduce water usage in ethanol plants, and providing input on ethanol and biodiesel production to the Lt. Governor's Rural Affairs Council and Biofuels Working Group, the Attorney General's Agricultural Advisory Committee and the Western Illinois University Rural Affairs Department.

The Agricultural Advisor also participated in the Interagency Pesticide Committee that responds to pesticide label issues, spills and water impact issues.

## Environmental Justice Policy Finalized and Conference Held in 2008

In 2008, the Illinois EPA finalized its Environmental Justice policy, formalizing the Agency's commitment to "promoting environmental equity in the administration of its programs to the extent it may do so legally and practicably" and pledging to "support the objectives of achieving environmental equity for all of the citizens of Illinois."

Environmental Justice or "EJ" is based on the principle that all people should be protected from environmental pollution regardless of race or income level and communities should receive an equitable share of environmental protection and benefits. It also incorporates meaningful involvement of all people with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

Details on the policy implementation and processes such as raising EJ issues in permitting, as well as contact information for the Agency's EJ Officer, Ken Page, can be found on the Agency's web site at ***www.epa.state.il.us/environmental-justice***. Spanish language versions as well as brochures in both English and Spanish are also available from the web site.

A statewide Environmental Justice Advisory Group also continued to provide input. In addition, the first statewide forum on EJ hosted by IEPA was held in Springfield in November 2008 and was attended by representatives of community organizations, environmental advocacy groups and business associations. After hearing an overview of the agency's environmental justice policy and procedures from Associate Director Elmo Dowd, attendees broke into discussion groups and made recommendations on increasing transparency, information-sharing and communicating with communities impacted by permitting of facilities, contaminated site cleanups and air releases and water discharges.

## IEPA Hosts Statewide Summit Conference and Launches Collaborative for Disposal of Unwanted Medications in 2008

### *Follows launch of pilot collection program in late 2007*

On Oct. 1, 2008, Illinois EPA hosted a Summit Conference at the University of Illinois at Springfield in which more than 130 representatives of a variety of organizations, including environmental advocates, local government and law enforcement, educators, health care provides, pharmacists and pharmaceutical manufacturers, wastewater and drinking water systems and solid waste agencies participated.

As a result of the conference, the Medication Education Disposal Solutions (MEDS) Action Committee, a diverse collaborative of public and private organizations was formed to implement additional educational initiatives on environmentally-responsible disposal of pharmaceuticals and personal care products, as well as to encourage additional partnerships for an expanded network of dropoff and pickup sites for unwanted medications.

In 2007, IEPA launched a pilot project of partnering with local governments, law enforcement agencies and pharmacies to establish drop-off or take-back locations. Contractors paid by IEPA through a portion of the fees collected at landfills pick up the drugs

for high-temperature destruction.
Since the summit conference, additional partnerships on both the municipal and county-wide level resulted in more drop-off locations that have been added to the IEPA pilot program, with additional ones on the drawing boards through partnerships involving police departments, pharmacies and local governments and solid waste agencies. Illinois EPA is a national leader in not only sampling for an expansive range of chemicals from pharmaceuticals in water supplies, with its sampling protocols now being used as a national model, but with its education and collection programs.

In addition, the MEDS Action Committee made available additional educational materials with the "don't flush" message and website links for information on disposal alternatives and locations. The www.epa.state.il.us/medication-disposal web pages provide extensive information on sampling and analysis for pharmaceuticals and the results of the Oct. 1 Summit, as well as fact sheets, FAQs, colorful posters, and Public Service Announcement audio files available for downloading that discourage the traditional disposal for unused medications of flushing them down the toilet or sink and potentially causing trace amounts to eventually end up in water bodies and potentially harm aquatic life. The PSAs have been sent to all radio stations in Illinois.

The web site also includes a Speaker's Bureau/Resource list of contacts who can help set up new collection and education programs. There are also links to pharmaceutical disposal information and research on the web sites of major participant organizations in MEDS, including p2d2, the Illinois-Indiana Sea Grant, and Prairie Rivers Network. Illinois-American Water Co. has also been an active partner, providing the booth space today in Peoria and also working with communities in its service territory to start up unused medication drop-off programs.

The p2d2 (pharmaceutical pill and drug disposal) program founded by Pontiac High School teachers Paul Ritter and Eric Bohm (who were keynote speakers at the Oct. 1, 2008 summit) and their students has been a key partner in the MEDS Action Committee and has given a graphic "mascot" Phil Bottle Phil for use in the educational materials, as well as sponsoring workshops for municipalities and others on establishing their own drop-off locations, typically in secure locations like police stations.

The Illinois EPA web site (***www.epa.state.il.us***) also contains numerous searchable databases making it easy for consumers and the general public to access information on their local public drinking water supply. The "Environmental Facts Online" button link on the right side of the agency home page is an easy portal to the database menu, which includes Drinking Water Watch and Safe Drinking Water Information System that can be searched with as little information as the name of the water supply or community. The public can find such information as sources of water, sampling results for potential contaminants specified under the federal Clean Water Act and any violations of the Maximum Contaminant Level standards, enforcement actions, and copies of the annual Consumer Confidence Report for their system.

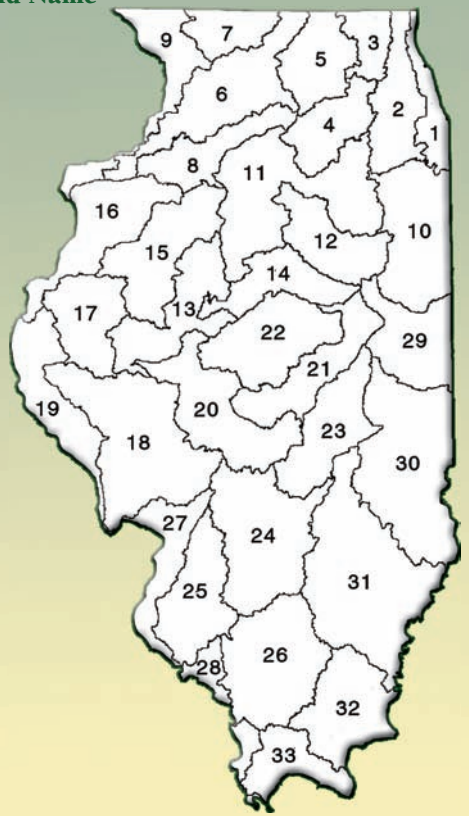
*"...By thy rivers gently flowing, Illinois, Illinois."*

# CLEAN WATER

*The Illinois EPA through its Bureau of Water oversees programs to protect and improve the state's surface and groundwater, as well as the development, construction and operation of facilities to collect, treat and discharge sewage, oversight for the development, construction and operation of drinking water treatment plants, low interest loans to fund these projects, and administers a variety of federal permit and grant programs to ensure safe use of Illinois waters recreationally and as essential components of good health and a healthy state environment.*

**Watershed Basin Number and Name**

1. Great Lakes/Calumet
2. Des Plaines
3. Upper Fox
4. Lower Fox
5. Kishwaukee
6. Rock
7. Pecatonica
8. Green
9. Mississippi North
10. Kankakee/Iroquois
11. Upper Illinois/Mazon
12. Vermilion (Illinois)
13. Middle Illinois
14. Mackinaw
15. Spoon
16. Mississippi North Central
17. La Moine
18. Lower Illinois/Macoupin
19. Mississippi Central
20. Lower Sangamon
21. Upper Sangamon
22. Salt Creek of Sangamon
23. Upper Kaskaskia
24. Middle Kaskaskia/Shoal
25. Lower Kaskaskia
26. Big Muddy
27. Mississippi South Central
28. Mississippi South
29. Vermilion (Wabash)
30. Embarras/Middle Wabash
31. Little and Lower Wabash/Skillet Fork
32. Saline River/Bay Creek
33. Cache



# ILLINOIS' WATER WEALTH

*It is estimated that Illinois' surface water resources have only about 10 miles of water less than the combined lengths of the Nile, Amazon, Yangtze (Changjiang) and Volga Rivers.*

Illinois has 87,110 stream miles of rivers and streams, 91,400 inland lakes and ponds within its borders, and 1,089 miles of major rivers make up part of its borders. The state has jurisdiction over a million acres of Lake Michigan. Illinois is a water-rich state with resources adequate to meet most existing and future demands.

Surface water in Illinois provides navigation, wildlife and aquatic habitats, waste dilution, drinking water, industrial and other commercial use, power generation, agriculture and irrigation. Groundwater is also plentiful in Illinois with high quality water available throughout the state from numerous aquifers. Natural and human-related activities can threaten full use of these resources, and in recognition of the State of Illinois' commitment to assuring plentiful clean and safe water for all citizens, ongoing thoughtful evaluation of current usage is needed.

Illinois receives an average 100 billion gallons of water a day from precipitation, with about 77 billion gallons of water each day returned to the atmosphere as evaporation from water and land surfaces, and transpiration from growing plants.

Overall, surface water meets most drinking water needs, with Lake Michigan the major water source for the state's most densely populated areas in and around Chicago, and with communities in the southern half of the state relying on rivers, lakes and reservoirs to meet their water needs.

The quality of all these water resources can be affected by:

- naturally occurring radioactivity, salinity, biologic organisms, and substances present in the state's geologic makeup;
- industrial or agricultural discharges and spills,
- overuse of farm and industrial products that contaminate groundwater and surface waters, and
- human activity that causes sediment runoff and causes accumulation that reduces reservoir capacity.

Illinois' growing population, with dense concentrations in some areas, increases demand for water, while a growing awareness of environmental issues, and the unpredictability of floods or droughts, all challenge agencies and programs charged with protecting the state's water resources.

The Illinois Environmental Protection Agency has responsibility for overseeing the state's public drinking water programs, programs that deal with waste water disposal, and protection and improvement of water quality in lakes, rivers and streams that furnish natural habitat and human recreational resources.

Surface waters that supply Community Water Supplies are sampled every three years as part of the Illinois EPA's Ambient Lake Monitoring Program, with samples analyzed for pesticides, volatile organic compounds and inorganic compounds. Between 1999 and 2004, approximately 64 percent of the lakes and reservoirs used for drinking water supplies that were tested showed some impairment, and 1,073 miles, or 78 percent, of the tested surface water sources were impaired. In most cases, impairments include lawn chemicals, pesticides and some naturally occurring chemicals.

Contaminants chiefly come from farming, mining and urban development. The contaminants can usually be safely removed during the drinking water treatment process but that can be costly.

# THREATS

*Past practices and emerging challenges require continuing vigilance on a variety of specialized fronts.*

## Mercury Contamination of Fish Tissue

Illinois routinely tests fish tissue to identify levels of toxic substances that tend to accumulate in fish and could pose health risks to the public eating locally-caught fish. In

2002, Illinois issued a statewide fish consumption advisory, cautioning children and women of childbearing age to limit their intake of Illinois fish, because of mercury contamination. In 2008, tests indicated that fish in thirteen lakes and four streams had mercury levels that warranted additional, specific consumption warnings. These water sources include the Ohio, Rock, Little Wabash, and Wabash Rivers.

Mercury can enter water from industrial or municipal wastewater, from historical contamination of sediments or can be deposited from the air (mainly power plant or industrial emissions).

## Watersheds

A watershed is the area that drains to a waterbody (a river, lake or stream). Illinois has 33 separate, defined watersheds, identified in the adjoining map. Almost all watersheds deliver a variety of pollutants to their downstream waterbodies. Rarely are surface waters impacted by only one source of pollution, since with few exceptions, every land-use activity is a potential source of water pollution. Because of their importance in overall water protection efforts, the Illinois EPA is focusing on watershed management to reduce water pollution.

## Rivers and Streams Assessment

The quality of the state's surface waters plays a fundamental role in the overall health of the environment and has a direct bearing on the economic and recreational opportunities available. Public interest in water quality has increased significantly in recent years.

The miles of rivers and streams that are assessed by the Illinois EPA have increased tremendously since passage of the federal Clean Water Act in 1972. Likewise, the quality of river and stream resources has improved dramatically due to ongoing efforts to control both point source ("end of pipe") and nonpoint source (runoff) pollution control efforts.

Because of the large number of Illinois lakes and streams, they must be assessed on a rotating basis, so ratings from specific years do not convey complete overall appraisals, but long term data between initial conditions in 1972 and the present provide a good comprehensive look at improvements.

In 1972, the percentage of miles of streams assessed as being in "good" condition was only 11.3 percent. Today, 62 percent are in good condition.

# CLEANING UP IMPAIRED WATERS

***TMDLs = The largest amount of a given pollutant a water body can receive without violating water quality standards or becoming unavailable for its designated uses.***

Water quality in some Illinois lakes, rivers, and streams has been impaired by pollutants from a variety of sources. Since the signing of the federal Clean Water Act (CWA) in 1972, water quality has improved greatly, mostly by regulation of point source discharges (discharges from an identifiable "end of pipe" source). Other degraded lakes, streams, and rivers still need attention to maintain a healthy environment and ensure these waters remain safe for all to use and enjoy.

- TMDL is short for Total Maximum Daily Load. It is the greatest amount of a given pollutant that a water body can receive without violating water quality standards and its designated uses.
- TMDLs take a voluntary, incentive-based approach to set goals for pollution reduction necessary to improve the quality of impaired waters, weighing all potential sources to determine the pollutant load allowed in a given lake or stream. It also takes into account a margin of safety, and the effects of seasonal variation.

The Clean Water Act does not require an Implementation Plan as part of a TMDL, but Illinois EPA has taken the initiative to include Implementation Plans for every TMDL that is developed.

Section 303(d) of the federal Clean Water Act requires states to identify waters that do not meet applicable water quality standards or do not fully support their designated uses such as swimming, boating, fish consumption or providing drinking water. States are required to submit a prioritized list of these waters to the U.S. Environmental Protection Agency for review and approval. The CWA also requires that a TMDL be developed for each pollutant of an impaired water body. Illinois EPA is responsible for carrying out the mandates of the Clean Water Act for the state of Illinois.

After reduced pollutant loads have been determined, a plan is developed that spells out limits for point source discharges and recommends best management practices for nonpoint sources. It estimates associated costs and lays out a schedule for implementation. Commit-ment to the plan by the citizens who live and work in the watershed is essential to success in reducing pollutant loads and improving water quality.

Through the end of 2008, 444 segment impairments that have been addressed through TMDLs were approved by Region 5, USEPA. Additionally, IEPA is currently in the process of doing additional TMDLs to address 263 segment impairments.

# NONPOINT SOURCE POLLUTION CONTROL PROGRAM

*Nonpoint source pollution carries contaminants from urban and rural sources into surface water, groundwater and wetlands.*

Precipitation moving over and through the ground picks up pollutants from farms, cities, mined lands, and other landscapes and carries these pollutants into rivers, lakes, wetlands, and groundwater. This is nonpoint source or NPS pollution. Major sources in Illinois are agriculture, construction erosion, urban runoff, hydrologic modifications, and mining.

Under Section 319(h) of the Clean Water Act, the Illinois EPA receives federal funds to implement NPS projects, working with local units of government and other organizations for corrective and preventative best management practices (BMPs) on a watershed scale; demonstration of new and innovative BMPs on a smaller, non-watershed scale; and the development of information/education programs on NPS pollution control.

## *NPS Categories for Section 319 Funding*

Funding for the Section 319 program allocates dollars to projects related to agriculture, construction erosion, urban runoff, hydrologic modifications, and mining. Each has its own characteristics and problems, which may include soil erosion, loss of storage capacity due to sedimentation, impaired water quality from excessive nutrients that speed the aging process of a water body, as well as bacterial problems, and color, taste and odor impacts.

Hydrologic modifications like dredge and fill, wetland drainage, streambank and lakeshore alteration, dam construction, stream channelization, flow regulation, bridge construction, and removal of riparian or lakeside vegetation can affect the biological, chemical, and physical properties of ground and surface waters and adjacent habitats.

Section 319 funding also supports programs for:

- public education about nonpoint source pollution and its effects; implementation of structural or vegetative practices, or administrative programs that promote NPS pollution controls like streambank stabilization, wetland creation or restoration, terraces, waterways, green roofs, etc.;
- planning, including documentation of non-point source pollution problems and related resource concerns, and development of strategies to protect and restore water resources impacted by nonpoint source pollution; and

- research to assess NPS water quality problems and improve NPS control techniques.

Some of the funding also supports staff and overhead expenses for administering the programs.

### *Funding for Illinois NPS Programs in 2007 and 2008*

In 2007, Illinois Section 319 programs received a total of $7,120,350 in funding for all categories. They included grant projects that prevented 2,128 tons of sediment, 4,759 pounds of total suspended solids, 1,465 pounds of phosphorus and 2,942 pounds of nitrogen per year from being discharged into Illinois water bodies.

In 2008, these programs received a total of $8,138,400 in funding for all categories. They included projects that prevented 1,360 tons of sediment, 1,360 pounds of phosphorus and 2,720 pounds of nitrogen per year from being discharged into Illinois water bodies.

Details on Section 319 projects are available online at ***www.epa.state.il.us/water/watershed/reports/bi annual-319***.

### *Priority Lake and Watershed Implementation Program (PLWIP)*

In June 1995, the Illinois state legislature passed the Conservation 2000 program, authorizing funding to implement the Illinois Lake Management Program Act (ILMPA).

Originally passed in 1989, ILMPA established four comprehensive objectives: 1) public education, 2) technical assistance, 3) monitoring and research, and 4) financial incentives for local lake management implementation. With the passage of Conservation 2000, the Illinois Environmental Protection Agency was able to initiate several programs designed to protect, restore, and enhance inland lakes.

One such program is the Priority Lake and Watershed Implementation Program (PLWIP). PLWIP is a reimbursement grant program that was started in 1997. Through this program the Illinois EPA works cooperatively with managers of publicly-owned inland lakes to implement lake protection, enhancement, and restoration activities. Although a local dollar match is not required for the PLWIP program, it is desirable.

For a lake to qualify for the program, it must meet the criteria of a priority lake. Priority lakes are defined by the Illinois EPA as unique, high quality aquatic resources, those which serve multiple purposes (e.g., recreation and public water supply), or in need of protection or restoration.

PLWIP funding is targeted at lakes where the lake is publicly-owned, causes and sources of pollution are apparent, work sites are easily accessible and visible, project size is relatively small, and local management entities are in a position to quickly implement selected treatments.

Reimbursement may be up to 100 percent and projects have a maximum allowance of $40,000 and must be done within a 1 1/2 year period. Projects typically begin in August or September following grant approval.

Fundable projects include shoreline stabilization; erosion control using rip rap, vegetative or bioengineering methods; aerator or destratifier installation; near-lake dry dams; buffer strips; spillway or dam repair; best management practices in the immediate watershed area; macrophyte harvesting to address public access. Dredging projects are not typically funded.

## THE LAKE EDUCATION ASSISTANCE PROGRAM (LEAP)

*The Lake Education Assistance Program (LEAP) is a grant program that offers up to $500 to schools for lake education. The funds may be used to buy equipment, educational materials, pay for transportation for field trips and even pay for substitute teachers.*

In 2007, 73 recipients received $33,390.45 for lake projects and education. In 2008, 86 applicants received $42,790.40. Projects ranged from a high school doing aquatic studies and bathometric measurements on their city park pond, which saved their community tax money when it came time to dredge, to a fifth grade class that gave a presentation of their LEAP project in front of approx 175 lake professionals at the annual Illinois Lakes Management Association conference. They received a standing ovation.

*LEAP grants from IEPA pay for field trips to nearby lakes for Illinois students.*

## IEPA'S VOLUNTEER LAKE MONITORING PROGRAM ENLISTS CITIZENS TO ASSESS WATER QUALITY

*The Illinois Volunteer Lake Monitoring Program (VLMP) is one of the oldest programs of its kind in the nation. In 2005, the Illinois VLMP celebrated its 25th anniversary and is one of the Agency's most successful and long-standing programs.*

The VLMP serves as an educational gateway for citizens to learn more about factors that affect lake water quality. By learning more about cause-and-effect relationships with their watershed and lake, volunteers are more likely to take an active role in protecting their lake by encouraging better lake management.

In recent years, the number of participants in the VLMP has averaged 300, monitoring approximately 165 Illinois lakes. In addition to the duties and responsibilities of the VLMP, many of our volunteers take part in global monitoring activities, such as the Great North American Secchi Dip-In and World Water Monitoring Day.

In 2009, the Illinois VLMP will begin its 29th monitoring season and is one of the Agency's most successful and long-lasting programs.

In 2006, the VLMP re-structured its program into a 3-tiered system. In Tier 1, volunteers monitor Secchi transparency and field observations.

*Bob Wittenborn, Volunteer from Highland's Silver Lake, works for the City of Highland at the water treatment plant.*

Monitoring is conducted twice per month from May through October typically at 3 in-lake sites.

In addition to monitoring Secchi disk transparency, Tier 2 volunteers enter the advanced water quality program by collecting water samples for nutrient and suspended solid analysis at Site 1. Water quality samples are taken once per month in May – August and October in conjunction with one Secchi transparency monitoring trip.

In Tier 3, volunteers are also part of the advanced water quality program and collect water samples at up to 3 sites on their lake. As in Tier 2, their samples are analyzed for nutrients and suspended solids; however they also collect an additional parameter: chlorophyll. With this additional parameter,

volunteers must collect and filter their own chlorophyll samples. This tier may also include DO/Temp profiles as equipment is available. As in Tier 2, water quality samples are taken once per month in May – August and October in conjunction with one Secchi transparency monitoring trip.

Data collected in either Tier 1 or Tier 2 are for educational purposes. It is used to make general water quality assessments and helps volunteers to determine trends or to identify potential problems in their lake and/or watershed. Data collected in Tier 3 is used in the Agency's Integrated Report and is used to determine lakes that appear on the Agency's impaired waters list.

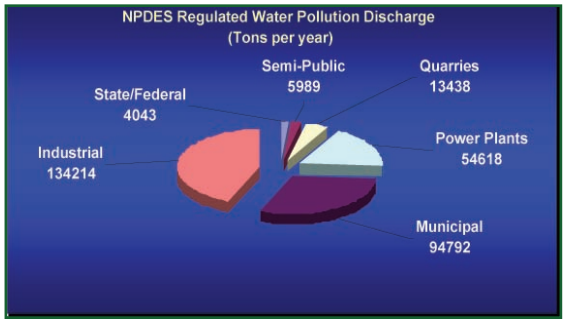
# ILLINOIS WATER POLLUTION CONTROL - COMPLIANCE PROGRAM

*Ongoing monitoring and reporting help ensure wastewater treatment operations are meeting the limitations built into their specific permits.*

## Background

The Clean Water Act of 1972 established a permit program for wastewater discharges, called the National Pollutant Discharge Elimination System permits. The permits, known as NPDES permits, set out requirements for both a national minimum level of treatment for various categories of industrial wastewater and domestic sewage, and any stricter limitations set by a state or necessary to meet water quality goals. In 1977, the Illinois EPA was delegated authority to issue the permits, including authority for compliance monitoring, enforcement, regulatory consistency, reporting, and public participation.

This chart illustrates the number of tons of pollutant load discharged per year in Illinois from industrial, municipal, power plants, quarries, semi-public, and State/Federal NPDES permitted dischargers. Industrial facilities are largely made up of manufacturing facilities. Municipal dischargers include publicly owned wastewater and drinking water systems. Power plants are facilities which generate electric energy. Quarries mine sand and gravel. Semi-public facilities include utility companies, residential subdivisions and homeowners associations. State/Federal facilities include public parks, campgrounds, prisons, and military installations.




## Compliance/Enforcement Activities

Sustained compliance is supported by monitoring, and timely, appropriate enforcement action for noncompliance. Early identification of potential compliance problems through field inspections and self-monitoring, and the timely issuance of Noncompliance Advisories and Violation Notices to achieve compliance, are key to the success of the compliance assurance program. Compliance monitoring activities include both field inspections of regulated and potentially regulated facilities, and in-office reviews of self monitoring reports such as Discharge Monitoring Reports (DMRs) and other information required to be submitted to the Illinois EPA.

## Field Inspections

The Clean Water Act and federal regulations require each state with an approved NPDES program to implement inspection and surveillance procedures to determine compliance or noncompliance with its applicable requirements. The Illinois EPA's field staff performs numerous types of inspections, including evaluation, sampling, reconnaissance, pretreatment, grant/loan, livestock, stormwater, operator assistance, and emergency response.

During this reporting period, increased attention has been given to compliance issues related to wet weather and storm water

*IEPA inspectors visit numerous facilities throughout the year and work with treatment plant operators.*

discharges. Pollution can occur from runoff caused by storm events. Storm water can affect industrial sites, construction sites, sewage collection systems, and confined animal feeding operations. Increased inspections of these entities have resulted in increased compliance and enforcement follow-up actions taken by the Agency.

### Self-Monitoring and Reporting

The self-monitoring portion of the NPDES permit sets forth sampling requirements as well as flow monitoring, analytical, and data reporting requirements. Much of the information is reported to the Illinois EPA through Discharge Monitoring Reports. A goal of self-monitoring and reporting is to produce data necessary for the Illinois EPA to determine facility compliance with NPDES permit requirements. Violations can result from:

- reported DMR data (discharges exceeding NPDES permit limits),
- failure to report required data,
- unachieved or late compliance requirements of NPDES permits, compliance commitment agreements (CCAs), and enforcement orders.

### Discharge Reports Can Now be Submitted Electronically

National Pollutant Discharge Elimination System (NPDES) permit holders submit approximately 3,500 signed Discharge Monitoring Report (DMR) forms to the Illinois EPA on a monthly basis. The DMR forms include results of sample analyses pertaining to surface water discharges required to be reported under terms of the NPDES permit. Beginning in April 2004, the Illinois EPA implemented a system to web-enable the DMR process into a paperless electronic submission process over the Internet. Reduced paperwork and improved speed and accuracy in reporting have resulted from eDMR implementation.

## SAFE DRINKING WATER ACT

***Oversight, testing and analysis are all required to ensure that water delivered to the user's tap meets state and federal standards for safety.***

The federal Safe Drinking Water Act was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. Amended in 1986 and 1996, the law requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. (SDWA does not regulate private wells which serve fewer than 25 individuals.)

Under the SDWA, the United States Environmental Protection Agency sets national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. US EPA, states, and water systems then work together to make sure that these standards are met.

Drinking water safety cannot be taken for granted. There are a number of threats to drinking water: improperly disposed of chemicals, animal wastes, pesticides, human wastes, wastes injected deep underground for disposal, and naturally-occurring substances can all contaminate drinking water. Likewise, drinking water that is not properly treated or disinfected, or that travels through an improperly maintained distribution system, may pose a health risk.

Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap.

# ILLINOIS PUBLIC WATER SUPPLIES DRINKING WATER QUALITY

### *Persons Served by Compliant Water Supplies*

The federal Safe Drinking Water Act gives the U.S. Environmental Protection Agency responsibility for setting national drinking water standards to protect the health of the 250 million people who get their water from public water systems. Currently, EPA has set national safety standards for more than 80 contaminants that may occur in drinking water. These standards are enforced in Illinois by the Illinois Environmental Protection Agency.

### *Maximum Contaminant Levels (MCLs)*

In nature, all water contains some impurities. At certain levels, minerals, just like man-made chemicals, are considered contaminants that can make water unpleasant or even unsafe. Some contaminants come from erosion of natural rock formations. Others are discharges from factories, chemicals applied to farmlands, or materials used by consumers in their homes and yards. Sources of contaminants might be in your neighborhood or might be many miles away. Maximum Contaminant Levels (MCLs) are set to ensure that drinking water be free of contaminants with the potential to cause either short term or long-term health effects. During 2008, over 95 percent of the total population receiving drinking water was served water that complied with limits on regulated impurities. This high percentage was maintained despite the start up of new rules on naturally occurring radium and arsenic in drinking water and on substances resulting as by-products from disinfection of source water.

### *Acute vs. Chronic Health Effects*

***Contaminants fall into two groups according to the health effects that they cause.***

Acute effects occur within hours or days of the time that a person consumes a contaminant. People can suffer acute health effects from almost any contaminant if they are exposed to extraordinarily high levels (as in the case of a spill). In drinking water, microbes, such as bacteria and viruses, are the contaminants with the greatest chance of reaching levels high enough to cause acute health effects. Most people's bodies can fight off these microbial contaminants the way they fight off germs, and these acute contaminants typically don't have permanent effects. Nonetheless, when high enough levels occur, they can make people ill, and can be dangerous or deadly for a person whose immune system is already weak due to HIV/AIDS, chemotherapy, steroid use, or other reasons. Chronic effects occur after people consume a contaminant at levels above EPA's safety standards for many years. The drinking water contaminants that can have chronic effects are chemicals (such as disinfection by-products, solvents, and pesticides), radionuclides (such as radium), and minerals (such as arsenic). Examples of the chronic effects of drinking water contaminants are cancer, liver or kidney problems, or reproductive difficulties.

# DRINKING WATER COMPLIANCE MONITORING

***Contaminants can make drinking water unattractive or unpleasant, as well as unsafe; frequent monitoring, testing and reporting provide important information on the quality of each community drinking water supply.***

To provide safe, clean, adequate water to consumers, public water supply operations must be properly constructed, operated and maintained. However, these alone cannot demonstrate the safety or quality of the water so it is necessary to collect representative water samples for analysis by certified laboratories on a routine basis. Sampling, proper operation, operational testing, record keeping and periodic facility inspection are effective means of documenting the safety and quality of the water reaching the consumer. The Illinois EPA requires all community water systems to analyze for specific contaminants as required by the Safe Drinking Water Act of 1974.

### *Treatment Techniques*

When there is no reliable method of measuring a contaminant at particularly low concentrations that is economically and technically feasible, a Treatment Technique is used rather than an MCL. A treatment technique is an enforceable procedure or level of technological performance which public water systems must follow to ensure control of a contaminant. For example, treatment techniques have been established for viruses, some bacteria, and turbidity (cloudiness).

### *Reporting Violations and Consumer Awareness*

Every community water supply (CWS) must provide an annual report (sometimes called a Consumer Confidence Report or CCR) to its customers. The report provides information on your local drinking water quality, including the water's source, contaminants found in the water, and how consumers can get involved in protecting drinking water. If the consumers have been looking for specific information about their drinking water, this annual report will provide them with the information they need to begin the investigation.

In addition, some community water supplies must also provide educational materials to the public regarding certain contamination. For example, supplies that exceed the lead action level must distribute lead public education materials (a brochure) to consumers. The materials spell out steps consumers can take to reduce the lead levels within their homes until the CWS has a chance to install or adjust treatment.

In both these cases, the CWS must report and provide examples of the materials distributed to the Illinois EPA which checks them to ensure they meet state and federal requirements.

For each violation described in the previous sections, public notification must be made. Public notification protects public health, builds trust with consumers by openly sharing information, and establishes ongoing, positive relationships with the community. Public notice also helps consumers understand rate increases and builds support for increased funding needed for drinking water treatment and protection. Properly done notices work for the benefit of the public water supplier as well as the public. If a problem occurs, educated consumers are more likely to understand the problem and support the actions a water utility must take.

## RADIUM

***The radium of concern to drinking water professionals occurs naturally in the earth's crust, where it has existed for millennia and can contaminate deep wells as it slowly leaches into the water.***

In December of 2000, after more than 10 years of study, U.S. EPA confirmed a standard of 5 picoCuries per liter as the maximum acceptable amount of naturally occurring radium in drinking water from deep wells. The problem is not found in shallow wells or in surface water such as Lake Michigan.

Prolonged exposure to high levels of several types of naturally occurring radium-related materials, jointly known as "radionuclides," can slightly increase chances of some kinds of bone cancer. In the case of radium in drinking water, U.S. EPA has defined extended exposure as a consumer drinking two liters (about two quarts) of water containing radium in excess of the standard of 5 picoCuries per liter every day over a 70-year lifetime.

Radionuclide removal is generally expensive and involves complicated water treatment processes. Over the last several years, Community Water Supplies (CWS) have been very active in installing treatment to achieve compliance with the radionuclide standards. In 2003, 114 CWS serving a total population of 603,759 exceeded a radionuclide standard. In 2008, only 30 CWS serving a total population of 300,845 still exceeded a radionuclide standard. This is a 51% improvement. Most of the remaining non-complaint CWS are under a compliance schedule in which compliance will be achieved in the shortest amount of time (depending on the selected treatment option).

## SINCE 2007, ALMOST 27,000 ILLINOIS CITIZENS HAVE REMOVED LITTER FROM 1,480 MILES OF ILLINOIS STREAMBANKS AND LAKE SHORES.

The Illinois EPA's Streambank Cleanup and Lakeshore Enhancement (SCALE) Program started in 2003; helps volunteers around the state conduct productive litter cleanups of stream banks and shorelines in their areas.

Using federal Clean Water Act, Section 319(h) funds, Illinois EPA provides grants ranging from $500 to $3,500 to local organizations to conduct their clean up events. The funds are typically used for safety attire, dumpster rentals, landfill tipping fees and promotional materials. The recovered material is recycled when possible, and disposed of properly if recycling is not an option.

Since 2003, more than 210 cleanups were conducted including 60 in 2007-2008. The organizations that participate in SCALE are as diverse, as the litter that they find during their SCALE events. The SCALE program depends upon the action and dedication of the local volunteers.

In 2008, the Alliance for the Great Lakes had 3,160 participants collect trash at 48 sites along Lake Michigan in Illinois. This group also documented the items that were collected. The following data reflects only a portion of the top items of concern collected: Cigarette Filters: 48,987, Balloons: 1,946, Aluminum cans: 4,281, Glass bottles: 5,429, Plastic bottles: 3,292, Food wrappers/containers: 13,050, and Straws: 5,541. In all, the volunteers collected over 5 tons of litter from almost 36 miles of Lake Michigan shoreline.

In 2007, The Thorn Creek Restoration Coalition held nine clean up days. A core group of volunteers returned to the stream throughout the summer. They focused on 3.5 miles of stream and removed approximately two tons of litter, their time spent was the equivalent of 108 participants.

Keep Salem Beautiful had 100 students and adults clean up approximately 4 miles of Salem City Reservoir lakeshore. This organization may hold the record for the youngest average participant age. The majority of participants is less than 4 feet tall and they are not much larger than the litter bags that they have filled. Despite their size, they collected 1.5 tons of litter in 2007.

The Round Lake Management Commission has been a SCALE participant since 2005, This group uses the Village website, press releases and flyer distribution to promote their event. In addition to the litter collection, the Village hosted a Coast Guard's Sail & Power Squadron boat safety inspection and certification session. A chapter of the Sea Scouts dropped by with their own boat to help with the clean up. In total, they had 25 volunteers that each donated about 3 to 4 hours.

In 2007, Living Lands & Waters reported events that included 502 participants, covering 40 miles of the Ohio and Mississippi Rivers. They estimated that 25 tons of trash was collected. What they didn't report was their other clean up events or programs in 2007. Living Lands & Waters conducts an Adopt-A-River Program that has over 200 miles of the Mississippi River adopted by local volunteers. As for their garbage statistics for 2007, it included over: 52,000 tires, 1,000 propane tanks, 12,000 balls, 4 cars, 10 football fields of Styrofoam, AND 3 sunken barges.

In 2007's program, 13,688 participants from 27 groups removed 210 tons of litter and debris from 754 miles and 32 acres of state water-fronts. During 2008, 32 groups involved 13,242 participants in cleanups that removed 143 tons of garbage from 728 miles of streambank and 327 acres of lakeshore.

Eleven of the 32 groups funded in 2008 have participated in SCALE since it began in 2003. Many of the groups have seen a significant reduction in trash levels at their cleanup sites. Some have increased the area that they are cleaning and others have added additional activities, such as storm drain stenciling and invasive species removal to maintain their volunteer base. The additional activities are not covered by SCALE funds.

The Friends of Morton Grove Forest Preserve included the following statement with their 2008 SCALE Event Report – *We are finding less large things then years ago. Hopefully people are getting the message and are becoming more responsible.*

## SOURCE WATER ASSESSMENT AND PROTECTION (SWAP)

***Waters that provide drinking water receive special scrutiny; new technology is improving the way information is available, and on-line links to programs let consumers find data specific for their water systems.***

Public water supplies in Illinois rely on both surface water and groundwater as source water. The Illinois EPA has completed a source water assessment and protection program (SWAP) required by 1996 amendments to the federal Safe Drinking Water Act. Illinois continues to update these assessments as a follow-up to engineering inspections and as a part of ambient groundwater monitoring.

Goals of the SWAP program were to:

- identify source water areas that supply water to public water supplies,
- list possible sources of contamination,
- determine how susceptible the source water is to contamination, and
- inform the public of the results of these assessments.

SWAP will help communities decide on important decisions for protecting their drinking water and its sources. This benefits not only consumers, but the health and economy of the community, and preserves natural resources.

All communities, whether they rely on groundwater or surface water for drinking water, are encouraged to take an active part in continuing to assess their drinking water supplies and institute protective measures. Information on community water supplies regulated by the Illinois EPA, can be obtained by contacting the Source Water Protection staff at 217-785-4787. Information about non-community supplies can be obtained from local health departments or the Illinois Department of Public Health at 217-782-5830.

Additional information can also be obtained online at ***http://www.epa.state.il.us/enfo/***.

### *Accessing Safe Drinking Water Information Made Easier*

The Safe Drinking Water Information System (SDWIS) Consumer Confidence Reporting and Monitoring Schedules web portal gives communities the ability to query those documents specific to their water systems. The access of the reports on the Internet has saved the Agency valuable resources over the course of the year, and assisted the systems.

### *Environmental Facts On-Line (ENFO) Improves Access to Agency Programs*

New information management technology is being used to make Agency programs more accessible and responsive. The Source Water Assessment and Protection Internet geographic information system is the cornerstone of the ENFO (Environmental Facts Online) suite of environmental information, is used by every project manager and the Contaminant Evaluation Group (CEG). The CEG is using this technology to determine areas where, at a minimum, notification should be provided to off-site private drinking water well owners. In addition, the Agency is requiring environmental consultants to use this technology under new amendments proposed to Pollution Control Board regulations.

### *2008 Groundwater Policy Forum Proceedings Available*

The 2008 Groundwater Protection Policy Forum, entitled "Groundwater Degradation & Sustainability," was held on September 24, 2008 in Peoria Illinois. The Illinois EPA, in conjunction with the Priority Regional Groundwater Protection Planning Committees, the Groundwater Advisory Council, and the Interagency Coordinating Committee on Groundwater, sponsored this conference. The Groundwater Protection Policy Forum was designed to address and assess groundwater issues that the state of Illinois is facing at present, and will become increasingly important in the near and distant future. The rapid population growth of the urban areas of the state relies on the availability,

sustainability, and quality of our groundwater resources

The 2008 Groundwater Forum objectives were geared towards assessing where we are in our sustainability journey, what we have found out along the way, and the assessment of real and potential degradation issues. The response of the state in managing the quality and quantity issues is paramount to the proper use and preservation of the groundwater resources. In addition, the engagement of key governmental, planning, and citizen stakeholders is critical in this evaluation of our groundwater resources.

The goals of the 2008 Groundwater Forum required groundwater experts to come together and share experiences and approaches to groundwater issues, discuss contaminant trends and emerging contaminants, develop approaches to addressing these new issues, and lay the groundwork for establishing priority initiatives and new policies.

The 2008 Groundwater Forum was comprised of presentations and concurrent working sessions. The morning consisted of a plenary session that addressed statewide groundwater issues including emerging contaminants, water quantity resources, and groundwater standards. The lunch speaker, Cassandra McKinney, provided a summary of McHenry County's Groundwater Protection Program. The afternoon concurrent breakout sessions focused on regulatory, local government, and agricultural issues. The proceedings from the 2008 Groundwater Forum web site at: can be found on the Illinois EPA web site at: http://***www.epa.state.il.us/water/groundwater/index.html***

## *Preliminary Results of Bacteria Monitoring from Illinois' Groundwater Dependant Community Water Supply Wells*

The United States Environmental Protection Agency published the Ground Water Rule (GWR) in the Federal Register on November 8, 2006. The purpose of the Ground Water Rule (GWR) which goes into effect on December 1, 2009 is to provide for increased protection against microbial pathogens, particularly fecal contamination, in public water systems that use groundwater sources.

**Illinois drinking water law and regulations are more stringent than the GWR, because in addition to treatment, using the best available source is required.**

Beginning in September of 2007 Illinois EPA began requiring sampling at all wells on a monthly basis for total coliform and Escherichia coli *(E. coli)* bacteria. This source sampling was done concurrently with the Total Coliform Rule (TCR) sampling conducted at sites in the distribution system This data has identified wells at risk which, in most cases, has led to mitigation efforts.

Additionally, as part of this effort, Illinois EPA has initiated the process of educating water supply officials and operators. Systems have been provided preliminary information about the GWR and state regulations via letters, seminars, and meetings. As resources allow, the Illinois EPA plans to continue this process through the 2009 effective date of the GWR.

***Results:*** To date, 3,701 wells have been (and continue to be) tested and evaluated at CWSs across the state. Based upon available data, 3,522 (or 95 percent) of these wells are currently viewed as using a sanitarily safe source of groundwater. Of the 179 (or five percent) CWS wells that have shown bacteria contamination 103 wells are in the process of being evaluated for necessary corrective actions. The remaining 76 wells have actually addressed (or are addressing) sanitary defects or corrected monitoring location concerns. The Illinois EPA has initiated evaluation of potential correlations between bacteria occurrence, hydrogeology, and other factors.

**95% of Illinois CWS wells appear to be using a safe source of groundwater.**

# INFRASTRUCTURE PLANNING AND FINANCIAL ASSISTANCE LOAN PROGRAMS

*Two active loan programs recycle state and federal dollars to help communities provide safe drinking water and minimize pollution from raw or inadequately treated sewage in their streams and rivers.*

Since the late 1980s, the Illinois EPA has administered the State Revolving Fund, now featuring two low interest revolving loan programs that have together distributed more than $2.8 billion in state and federal funds to communities around the state. These loans assist local governments with the installation or expansion of sewage and drinking water facilities, providing desired services to residents while helping to achieve or maintain compliance with state and federal regulations. Congress first authorized the wastewater program (CWSRF) in 1989, and added authorization for the drinking water program (PWSLP) in 1997. Through 2008, a total of 504 CWSRF (wastewater) and 262 PWSLP (drinking water) infrastructure loans have been made, with funding provided through the joint programs now at $2.804 billion and counting.

During 2007 a total of 24 applicants were approved to receive more than $176.1 million in CWSRF project loans under the program, and in 2008, 16 more were funded at a total dollar level in excess of $156 million. The drinking water program demonstrated similar success, with almost $38 million awarded in 2007 for 17 PWSLP projects, and more than $71 million committed to 22 additional projects in 2008.

Originally, 80 percent of the funding for these programs came from the federal government in the form of federal capitalization grants, with a 20 percent state match requirement making up the balance of the capitalization funding. Since that time, federal and state resources have continued to capitalize the fund, and a well developed loan repayment stream adds additional funding for infrastructure projects.

### *Wastewater loans approved in 2007 and 2008 included:*

| | |
|---|---|
| Metropolitan Water Reclamation District of Greater Chicago | $43,000,000 |
| Bloomingdale | $12,328,260 |
| Wilmington | $13,597,663 |
| Millstadt | $6,459,299 |
| Pleasant Plains | $2,029,451 |
| Cambria | $465,000 |
| Winchester | $541,020 |
| Evanston | $7,376,907 |
| Lockport | $10,000,000 |
| Wilmette | $359,980 |
| Bloomington-Normal Water Reclamation District | $6,252,140 |
| Westville | $725,000 |
| Thorn Creek SD-Holbrook | $914,898 |
| New Memphis Sanitary District | $406,057 |
| Wilmette | $317,142 |
| Diamond | $6,772,881 |
| Pingree Grove | $463,000 |
| East Peoria | $1,000,000 |
| Fox Metro Water Reclamation District | $15,000,000 |
| Glenbard Wastewater Authority | $7,700,000 |
| Antioch | $15,688,623 |
| Davis Junction | $11,846,600 |
| Adams Co. WD | $1,244,384 |
| MWRDGC-DesPlaines Pump Station | $11,559,927 |
| MWRDGC-Calumet Pump Station | $27,697,350 |
| Villa Park | $335,265 |
| Flagg Creek WRD | $7,613,684 |
| Marseilles | $5,911,029 |
| Stockton | $600,000 |
| Swansea | $21,993,680 |
| Villa Park | $802,550 |
| Fox Metro WRD | $17,500,000 |
| Granite City | $1,660,939 |
| MWRDGC(39th St. conduit) | $65,000,000 |
| North Chicago | $1,752,856 |
| Mascoutah | $3,273,529 |
| New Baden | $414,343 |
| Franklin | $1,523,817 |
| Butler | $281,180 |
| Onarga | $1,689,919 |

### *Drinking Water loans approved in 2007 and 2008 included:*

| | |
|---|---|
| Nauvoo | $2,000,000 |
| Geneva | $8,617,559 |
| Seneca | $1,042,000 |
| Marissa | $1,711,945 |
| Villa Park | $2,130,000 |
| Somonauk | $1,341,186 |
| Waterloo | $1,503,970 |
| Lincolnwood | $5,792,715 |
| Cedarville | $553,378 |
| Lake Zurich | $1,768,390 |
| Pingree Grove | $700,000 |
| Fyre Lake Water Co. | $825,000 |

| | |
|---|---|
| Modesto | $200,000 |
| O'Fallon | $1,014,550 |
| Chandlerville | $250,000 |
| Mt. Carroll | $4,173,100 |
| Mason City | $2,587,000 |
| Dixon | $5,217,402 |
| Ohio | $1,160,000 |
| O'Fallon | $5,385,450 |
| Milledgeville | $1,135,508 |
| Rend Lake Conservancy District | $13,400,000 |
| Marquette Heights | $900,000 |
| Mount Morris | $706,382 |
| Clark-Edgar RWD | $7,995,208 |
| Rockford | $8,308,283 |
| Prairie du Rocher | $369,424 |
| Scott, Morgan and Greene Water Coop | $552,218 |
| Piper City | $115,116 |
| West Frankfort | $345,853 |
| Smithton | $450,112 |
| Coal City | $1,425,000 |
| Bloomington | $1,141,220 |
| Rockford | $12,512,945 |
| Rockford | $2,297,070 |
| Otter Lake WC | $6,263,975 |
| Mechanicsburg-Buffalo WC | $1,039,458 |
| Arenzville | $812,603 |
| Beardstown | $2,500,000 |

*New wastewater infrastructure projects are financed through IEPA loans.*

### *Unsewered Community Grants*

In addition to the low interest loan programs funded through the State Revolving Fund, the Illinois EPA also manages a grant program for unsewered communities in Illinois. During the biennial period, approval was given for five projects, including grants to the communities of Huey ($1,139,498), Chebanse ($4,251,504), Shumway ($983,401), Essex ($2,325,458) and Springerton ($509,922).

## GROUNDWATER ASSESSMENT

***Groundwater assets underlie much of Illinois, offering drinking water resources to consumers in all parts of the state.***

Groundwater comes from wells that tap into aquifers at varying depths. Owing to Illinois' geology, the northern third of the state has several high-yielding aquifers and most communities there rely upon groundwater. These aquifers include numerous sand-and-gravel aquifers above the bedrock surface, shallow bedrock dolomite and limestone aquifers (less than 300 feet deep), and deep bedrock limestone and sandstone aquifers (more than 300 feet deep). Water quantity and its quality varies greatly among aquifers. Farms and rural residents all across Illinois rely on private shallow wells for their water supply.

Northeastern Illinois, the state's major consumer of water, depends heavily on water from Lake Michigan. Groundwater pumpage is also a large source of water for many Chicago suburbs. Diversion of lake water averages about 2 billion gallons per day of which 1.1 billion gallons per day is for public water supply, which represents 41 percent of Illinois' total water withdrawals for all purposes, excluding power generation. Water usage values for Illinois must be used with caution because reporting is voluntary, and many users do not report amounts used.

Groundwater quality is a high priority in Illinois. Water quality degradation or contamination resulting from point and nonpoint sources throughout the state is of concern. In many industrialized parts of the state (including the metropolitan areas of Chicago, Rockford, and East St. Louis) groundwater in glacial deposits and bedrock aquifers has been degraded by improperly contained or disposed of chemicals. In some agricultural areas, the quality of groundwater in the underlying shallow aquifers has been degraded by the routine application of agricultural chemicals. Surface water quality has been degraded in some areas because of the influx of contaminated groundwater. To this end, the Illinois EPA continues to evaluate the question of how good is the water by implementing an ambient monitoring network of community water supply wells. Illinois EPA is working with the Governor's Ground-water Advisory Council to respond to increasing contamination of community water supplies with volatile organic compounds.

The Illinois EPA utilizes this Ambient Network to:

- provide an overview of the groundwater conditions in the CWS wells in Illinois;
- provide an overview of the groundwater conditions in the major aquifers in Illinois;
- establish baselines of water quality within the major aquifers in Illinois; and
- identify trends in groundwater quality in the major aquifers in Illinois.

Water quality parameters sampled for include: field temperature, field specific conductance, field pH, field pumping rate, inorganic compounds (IOC), volatile organic compounds (VOC), and synthetic organic compounds (SOC).

In addition to the Illinois EPA's Ambient Network, the Illinois Department of Agriculture has implemented a monitoring well network for pesticides in shallow groundwater aquifers to assist with implementation of Illinois' Generic Pesticide Management Plan that has been endorsed by the United States Environmental Protection Agency (U.S. EPA).

USEPA established the Ground Water Rule (GWR) in November 2006. The GWR focuses on drinking water systems that use groundwater as their source in accordance with the Safe Drinking Water Act. It ensures the safety of source water by making sure that the wells are protected from microbial pathogens.

Under the GWR, water suppliers are required to use the best available source. Community water systems must comply with the regulation by December 1, 2009.

This monitoring program has provided two main benefits: it identifies wells at risk for contamination, and presents a comparison between other monitoring systems to gauge effectiveness.

So far, 3,701 wells have been tested at community water systems in Illinois. Based on this data, 3,522 of these wells are considered to be sanitarily safe sources. For each of the 179 wells that showed bacteria contamination, 10 wells are being evaluated for necessary corrective action, and 72 have corrected or are in the process of taking corrective action.

*"O'er thy prairies verdant growing, Illinois, Illinois."*

# CLEAN LAND

***Illinois EPA's goals are to protect human health and the environment to assure that hazardous and solid waste will be managed in a sound manner, and to reduce or control risk to human health and the environment by overseeing the cleanup of contaminated sites.***

Prior to 1970, waste disposal and management practices in Illinois were regulated by the Department of Public Health. Regulations at that time were limited to performance-based standards that prohibited obvious threats to human health and the environment, such as blowing litter, odors, and vermin. These controls were not effective in protecting one of

the most important natural resources in Illinois, its groundwater. In 1970, the Illinois General Assembly established the Illinois Environmental Protection Agency to ensure that important resources are protected and that interrelated environmental problems are addressed through a multimedia approach.

Throughout the first 25 years, the Illinois EPA emphasized the development of new regulations and programs necessary to perform its mission to protect human health and the environment by (1) ensuring that wastes are managed in a safe manner and (2) that contaminated sites posing a risk to human health and the environment are cleaned up. The development and enforcement of the clean land regulations has resulted in a significant improvement in environmental conditions.

Uncontrolled disposal of hazardous wastes has practically been eliminated, hundreds of contaminated sites have been cleaned up and returned to productive use, hazardous waste generation has been significantly reduced, and all landfills meet Illinois standards for design and performance that protect groundwater quality.

Although the mission has not changed, the maturation of the Clean Land programs within the Bureau of Land has required a shift over the past decade from regulatory development and enforcement to increased citizen involvement if they are to more fully accomplish their goals. Recent initiatives include:

- establishment of the Office of Brownfields Assistance, which administers one of the pioneering and most successful brownfield redevelopment programs in the nation.
- creation of one of the first Household Hazardous Waste Collection programs in the nation that provides homeowners and consumers with a safe and appropriate alternative for disposal of their hazardous and toxic wastes.
- expansion of the Used Tire Program in response to serious health threats such as West Nile Virus and other forms of encephalitis.

## SAFE WASTE MANAGEMENT

To ensure waste is safely managed in Illinois, the Bureau of Land implements comprehensive permitting, inspection and enforcement programs for facilities managing municipal waste, industrial waste, and hazardous waste. In 2007, municipal solid waste generated in Illinois was managed and disposed primarily through four types of operations.

### Landfills:

16.3 million tons of municipal solid waste was disposed in 46 landfills in Illinois during 2007. Thirteen percent of this waste was accepted by 24 landfills from 12 other states (besides Illinois), including the adjacent states of Missouri, Iowa, Indiana, Wisconsin, Kentucky and seven other states. One of these 46 landfills also accepted hazardous waste. Three landfills near Harrisburg, Jerseyville and Streator continued to remain inactive through most, if not all, of the year 2007; although they again reported capacity remaining as of January 1, 2008.

During 2007, Illinois EPA approved a 14.9 acre lateral landfill expansion on March 13 at ADS/McLean County Landfill, Bloomington. At Laraway RDF, Elwood, we also approved a vertical expansion on October 30 adding 2.2 more years to site life. These expansions were included in the state wide capacity figure of 988.6 million gate cubic yards of remaining capacity, as reported on January 1, 2008. Chart 2 (reports capacity remaining and waste disposed amounts)

There were additional expansions that were approved by Illinois EPA's Bureau of Land Permit Section in the time period between January 1 and June 30, 2008 that were not included in the capacity reported by landfill operators to Illinois EPA on January 1. These were: expansions at River Bend Prairie, approved January 2, at Rochelle Municipal #2 on May 16 and at Winnebago Landfill, Rockford, on May 16.

### Compost Facilities:

401,127 tons of landscape waste was processed at 40 compost facilities in Illinois during 2007. An increasing amount is being handled by land

*Compacting and spreading garbage at a municipal waste landfill*

application sites or at permit-exempt composting operations located on farms, which is not required to be reported to the State. Two new compost facilities opened in Centralia on March 7, 2007 and in Romeoville on March 4, 2008.

## Recycling:

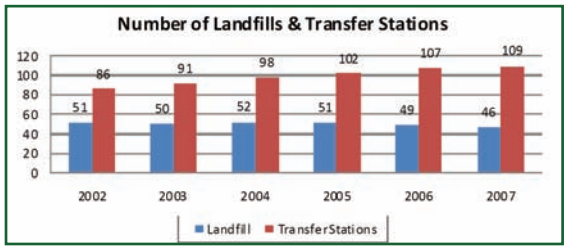
Local recycling coordinators estimate that approximately 9.1 million tons of municipal waste was diverted from disposal through recycling. Amounts of municipal waste generated were estimated to be about 23.1 million tons.

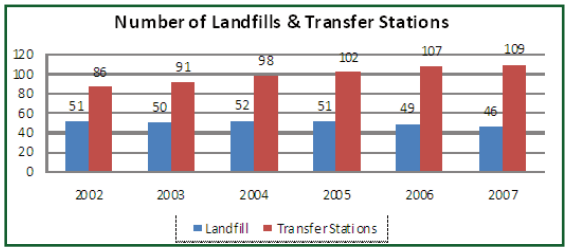
## Transfer Stations:

109 transfer stations processed nearly 8.2 million tons of municipal waste destined for either disposal in landfills or recycling markets. However, since the reporting was voluntary, this amount is estimated.

## Trends in Solid Waste Management

The trend in Illinois is toward fewer, but larger, regional municipal solid waste landfills owned by private companies complemented by a greater number of local transfer stations. By 2002, the number of landfills accepting municipal solid waste had dropped to 51; while 86 transfer stations were active (mainly in the Chicago Metropolitan Region) to consolidate wastes for transport to other solid waste management facilities. Five years later, the number of municipal waste landfills was 46 and the number of transfer stations had increased to 109. Seventy-four of these transfer stations are located in the Chicago Metropolitan area. See chart 1




An issue for local commerce is the closure of any of these active landfills. As of Feb. 1, 2008, River Bend Prairie Landfill, Dolton remains the only facility open to take wastes from Cook County. By the end of January 2008, another landfill had closed in Hillside, in western Cook County. Landfill closures also have an unfortunate resultant effect on revenues available to implement recycling and environmental education programs at the local level.

Municipal waste generation rates and landfill disposal capacities vary widely within the various geographic areas of the state. The Chicago Metropolitan area generated more pounds of waste per capita per day (11.4) than any other area of the state yet has the lowest landfill life expectancy of seven years (based upon 2007 data). Years of capacity remaining state-wide, as reported by landfill operators themselves, is 18 years.

There is a moratorium against landfills within Chicago's city limits. Land prices are high in Chicago. Therefore, waste generated by Chicago Metropolitan regional's population then may become a state-wide issue of interest to many Illinois counties. Also affected is available capacity in at least two adjacent states of Indiana and Wisconsin.

# IRID

## Funding to crack down on illegal dumps

The IRID (Illinois Removes Illegal Dumps) Program is a relatively new initiative that has

and will provide the largest state funding in IEPA history to clean up orphan open dump sites. In an effort to facilitate the removal of waste and the prevention of future open dump sites, the IEPA's Field Operations Section hired five IRID contractors to perform remediation work throughout the State. The IRID Program also has eight field staff and a program manager to administer the Program.

To date, the Program has completed over 225 open dump cleanups in every region of the State. This amounts to approximately 36,330 tons of waste sent to landfills, 865 tons of recyclable metals to salvage yards, and 625 tons of waste tires to permitted tire recycling sites.

*Contractors hired by IEPA recycle or properly dispose of material in dumps targeted by IRID.*

**Bureau of Land Regional Number of IRID Cleanups Completed**

| Region Name | Completed Calendar Years '07-'08 | Total Completed Since 9-06 |
|---|---|---|
| Rockford | 1 | 7 |
| Des Plaines | 23 | 30 |
| Peoria | 30 | 34 |
| Champaign | 8 | 10 |
| Springfield | 9 | 14 |
| Collinsville | 36 | 42 |
| Marion | 70 | 88 |
| **TOTALS** | **177** | **225** |

# CLEANUP OF CONTAMINATED PROPERTIES

## Leaking Underground Storage Tanks (LUST)

At 979 cleanups, Illinois EPA's LUST Program led the nation in cleanups completed and acres remediated at properties contaminated by underground storage tank releases between October 2007 and September 2008. This accomplishment was possible due to Illinois EPA's efforts of closing (clearing out) old releases in the LUST Program's backlog. The Illinois EPA has continued this effort between October 2008 and September 2009, and a similar result is anticipated in 2008-2009. Illinois EPA's commitment to remediating contaminated properties and protecting human health and the environment continues.

As the LUST Program enters its 20th year, over 14,500 acres have been remediated through issuance of No Further Remediation letters. Furthermore, the number of sites remediated has exceeded the number of new releases reported for the eighth consecutive year. That is also a significant accomplishment.

In the coming years, the LUST Program's goal is to prioritize the remediation of contaminated UST sites by taking into account threat to human health and the environment, benefit to the community, and cost-effectiveness, and by using greener cleanup practices.

## Site Remediation Program (SRP – Voluntary Cleanups)

Illinois EPA's voluntary cleanup program is one of the oldest in the nation (one of two that started in 1989). To date, over 3,798 sites have been enrolled in the program, with 520 sites (or 14 percent of all sites) enrolling in 2007 and 2008.

## Superfund (National Priorities List or NPL) Program:

As the Superfund Program finished its twenty-ninth year, construction had been completed at 29 of the 51 NPL sites in Illinois. Completion of construction qualifies the site for deletion from the NPL. To date, Illinois EPA, in conjunction with the United States Environmental Protection Agency and Potentially Responsible Parties has remediated over 4854 acres of some of the most

contaminated properties in Illinois. Construction projects are ongoing at 9 NPL sites. The Superfund program has a longstanding "enforcement first" policy to pursue viable, responsible parties to pay for or carry out cleanups. In Illinois, 78 percent of the NPL construction projects underway are lead by Potentially Responsible Parties.

## Federal Facilities Program:

Sites addressed by the Federal Facilities Program include some of the largest properties undergoing remediation in Illinois. These sites offer tremendous potential for economic redevelopment and restoration of wildlife habitats. Since 1995, at least partial remediation has been completes at some 81 sites encompassing some 44,104 acres.

## RCRA Corrective Action Program:

This program directs owners and operators of hazardous waste management facilities in the cleanup of releases from where waste was managed in the past, such as tanks, impoundments, landfills, and drum storage. Since 1996, over 9,000 acres have been remediated under the requirements of this program.

## Response Actions Program:

This program takes preventive or corrective remedial action, particularly where other cleanup programs may lack the ability to take short-term remedial actions. During 2007 and 2008 the program performed investigations and cleanups at old manufacturing plants, former waste oil recycling operations, contaminated agricultural facilities and other sites where surface water, groundwater, soil and air are contaminated with hazardous substances. By the end of 2008 over 1,186 acres were remediated by this program. Work was completed on 123 sites in 83 communities.

## West Nile Virus Issue:

Improperly managed used tires pose a significant threat to human health and the environment by providing a prime breeding habitat for disease-carrying mosquitoes and by creating a fire hazard. The species of mosquitoes most often found in improperly managed used tires, the Northern House mosquito *(Culex pipiens)*, is also the primary carrier of the West Nile virus. Therefore, the identification and removal of used and waste tire dumps continues to be a top priority for the Illinois EPA. The Illinois EPA conducts over 1000 inspections at used tire facilities and responds to over 500 complaints from local officials and citizens annually. For more information on the Illinois EPA's Used Tire Program, please contact the Illinois EPA at (217)785-8604 or visit: ***http://epa.state.il.us/land/tires/index.html***.

## 2007/2008 Used tire Program

Since the inception of the Illinois EPA's Used Tire Program in 1990, more than 20 million used and waste tires have been removed from the environment and properly disposed through the Illinois EPA's collection and enforcement programs. During 2007/2008, the Illinois EPA removed more than 18,500 tons of used and waste tires from the environment, which is the equivalent of nearly 1.5 million passenger tires. Included in the removal activities were 69 countywide used tire collections throughout the state. The Illinois EPA will continue to maintain strong inspection, enforcement, cleanup, and marketing programs to support end use markets for used tires in Illinois. Current and future projects in which the Illinois EPA are involved include a proposed rulemaking to update the used tire management regulations and continued involvement in the leadership of the Tire Workgroup of the Resource Conservation Challenge (RCC), a national partnership between U.S. EPA, states, industry and academia to promote quality government used tire regulatory and cleanup programs and to further develop and promote end use markets for used tires.

## Countywide Waste Tire Collection:

Since 1990, the Illinois EPA has co-sponsored 557 Countywide Used Tire Collections, resulting in the collection and recover of 85,500 tons of used tires, which is the equivalent of nearly 6.84 million passenger tires. During 2007 and 2008, Illinois EPA co-sponsored 69 countywide used tire collections resulting in the collection and recovery of 18,500 tons of used tires, which is the

equivalent of nearly 1.5 million passenger tires. The majority of the used tires collected are converted into tire-derived fuel (TDF) and burned for energy recovery in utility boilers and cement kilns. Other uses for used tires include recycling into playground flooring and landscape mulch, and crumb rubber for use on athletic fields and in the manufacturing of various rubber products.

*IEPA has collected millions of waste tires for recycling.*

## Local Government Collection Program

In 2007, the Illinois EPA initiated the local government collection program for used and waste tires collected by units of local government. The purpose of this program is to provide units of local government with disposal service for all used and waste tires collected from public and abandoned properties located within their respective jurisdictions. The Illinois EPA initiated this program with the City of Chicago and the program has steadily expanded since its inception to include more than 40 units of local government. The Illinois EPA will continue to expand this program to all interested units of local government. This expansion is particularly important given the discontinuance of the countywide used tire collections in 2009. The countywide used tire collections have outlived their usefulness given the statutory restrictions governing the consensual removal program and the Illinois EPA must continue to find more appropriate and efficient ways to spend our limited resources. Although the Illinois EPA does not plan to conduct countywide used tire collections in the future, we will continue to conduct consensual removals on a case-by-case basis to ensure compliance with the statutory provisions.

## Household Hazardous Waste Collections:

With the assistance of local governments, the Illinois EPA sponsored 41 household hazardous waste collections in 2007 and 2008 at a state cost of over $2.5 million that does not include Illinois EPA administrative expenses or the costs to local co-sponsors for publicity, traffic control, or other local service. Over 3,600 drums of waste were collected. Since the program began in 1989, 459 one-day collections have been held, with more than 79,600 drums being collected from approximately 409,100 households and disposed at permitted hazardous waste facilities or recycled. Illinois EPA assists


*Household hazardous waste drop-off*

communities with the costs of disposal of household hazardous waste collected at long-term collection facilities and locally sponsored collection events. Long-term collection facilities operate in Naperville (since October 1992) and Rockford (since 1995) and in the City of Chicago since June 2006. The Solid Waste Agency of Lake County conducts Household Chemical Waste collections at various locations in the county. In 2007 and 2008, the Illinois EPA provided over $1.7 million for the disposal of more than 9,280 drums of household hazardous waste at these operations.

## School Hazardous Waste Collections:

In 2007 and 2008, the Illinois EPA, in partnership with 208 schools, collected over 600 drums of hazardous materials, such as laboratory wastes, expired chemicals, unstable compounds, mercury containing items, toxic or flammable materials, at an average annual state

cost of $196,601. Since 1996, the Illinois EPA has conducted 873 hazardous education waste collections. In 2007, the Illinois EPA expanded the school hazardous waste collections program to assist schools through June 2010.

## Partners for Waste Paint Solutions:

About 25 percent of the waste collected during the Household Hazardous Waste Collections is paint. To address this large volume item, the Illinois EPA initiated the "Partners for Waste Paint Solutions" Program in 1995. These partnerships offer consumers the opportunity to deliver unwanted paint to local participating paint partners where it will be reformulated or remixed for reuse. Unusable paint is managed by the Illinois EPA. In 2007 and 2008, the Illinois EPA coordinated with 21 paint partners to collect, reformulate and reuse over 21,240 gallons of unwanted paint products from the public. The reformulated paint was donated or resold. Another 105,765 gallons of paint was bulked for fuel blending or disposal. The cost incurred in 2007 and 2008 by Illinois EPA for this program was $369,682.

## E-Waste:

E-waste, or obsolete electronic products, is the fastest growing component of our solid waste stream. E-waste contains toxic materials such as lead, mercury, arsenic, cadmium, and beryllium that pose a risk to human health and the environment. E-waste also contains valuable materials—such as copper and gold—that can be reused, which conserves energy and natural resources. Illinois' new Electronic Products Recycling and Reuse law effectively deals with the growing problem of toxic e-waste for Illinois residents via e-waste collection, recycling and refurbishment.

The new law, which took effect on September 17, 2008, requires that manufacturers of computers, monitors, laptop computers, printers, and televisions must develop recycling programs in the State. Local governments may choose to partner with electronic manufacturers and/or recyclers as a means of augmenting existing electronic recycling programs.

Beginning January 1, 2012 all computers, televisions, monitors, and printers will be banned from landfill disposal.

## Industrial Materials Exchange Service:

Illinois EPA maintains Industrial Materials Exchange Service (IMES) to provide a clearinghouse for businesses to offer waste by-products, off-spec items, and overstocked, damaged or unwanted materials for reuse rather than disposal. Since 1981, over 1,740 million gallon equivalents have been diverted from disposal at an estimated cost savings of $503.8 million. In 2008, the IMES contained 730 material listings. Of these listings, 101 were successful, or a total of 149.6 million gallon equivalents, were diverted from disposal. The estimated cost savings to industry was estimated at $81.6 million.

## Brownfields:

Brownfields are properties at which redevelopment is hindered by the presence or perceived presence of environmental contamination. In 1998, the Illinois EPA created the Office of Brownfields Assistance to provide technical and financial support for the redevelopment of Brownfields.

## Municipal Brownfields Redevelopment Grant Program:

Illinois EPA offers municipalities grants up to $240,000 for investigation and cleanup of brownfields. To date, 129 municipalities have been awarded over $18.4 million. In 2007, $64,942 was awarded to one municipality, while in 2008 $20,000 was awarded to one municipality.

## Grants issued since the Inception of the Program: Municipality (Grant Amount, Including All Budgetary Amendments)

| | |
|---|---|
| Alton | ($206,706) |
| Arthur | ( $41,836) |
| Augusta | ($239,965) |
| Aurora | ($819,994) |
| Barrington Hills | ($239,898) |
| Bartlett | ($240,000) |
| Bartonville | ($119,959) |
| Bedford Park | ($240,000) |
| Belleville | ($114,108) |
| Bellwood | ($120,000) |

| | |
|---|---|
| Belvidere | ($240,000) |
| Blue Island | ($239,977) |
| Braidwood | ( $40,438) |
| Broadview | ($240,000) |
| Brookfield | ($216,011) |
| Burnham | ($120,000) |
| Cairo | ( $33,515) |
| Calumet City | ($182,210) |
| Canton | ($240,000) |
| Carbon Cliff | ( $38,377) |
| Chicago Heights | ($240,000) |
| Cicero | ($105,486) |
| Collinsville | ($128,887) |
| Crete | ($240,000) |
| Decatur | ( $59,626) |
| De Kalb | ($100,617) |
| Des Plaines | ( $50,656) |
| De Pue | ($119,995) |
| Dixon | ($107,094) |
| Downers Grove | ($183,600) |
| Du Quoin | ( $73,152) |
| East Moline | ($239,943) |
| East Peoria | ($170,722) |
| East St. Louis | ( $56,722) |
| Easton | ( $61,970) |
| Effingham | ( $33,005) |
| Elgin | ($180,976) |
| Eureka | ($116,745) |
| Farmington | ( $35,361) |
| Ford Heights | ($240,000) |
| Franklin Park | ($224,137) |
| Freeport | ($240,000) |
| Fulton | ($161,970) |
| Galesburg | ( $70,600) |
| Geneva | ( $8,244) |
| Gillespie | ($100,414) |
| Glencoe | ($240,000) |
| Glen Ellyn | ( $14,264) |
| Granite City | ( $42,505) |
| Grayslake | ( $45,344) |
| Harrisburg | ( $79,784) |
| Harvey | ($136,810) |
| Havana | ( $92,469) |
| Herrin | ( $20,000) |
| Hoopeston | ($134,485) |
| Justice | ( $25,891) |
| Karnak | ( $70,169) |
| Lacon | ($206,995) |
| La Grange | ($119,766) |
| Lanark | ( $78,182) |
| Lansing | ($239,864) |
| LeRoy | ($154,461) |
| Lemont | ($239,828) |
| Lincolnshire | ( $25,253) |
| Lockport | ($119,325) |
| Lynwood | ( $42,802) |
| Machesney Park | ($107,341) |
| Macomb | ( $49,245) |
| Marion | ( $44,187) |
| Markham | ( $60,308) |
| Mattoon | ($178,209) |
| Maywood | ($110,523) |
| Mendota | ( $87,021) |
| Metropolis | ( $75,786) |
| Minooka | ( $91,310) |
| Moline | ($193,416) |
| Monticello | ($239,618) |
| Morton Grove | ( $56,382) |
| Mt. Carmel | ( $81,817) |
| Mt. Vernon | ($138,037) |
| Naplate | ( $37,954) |
| New Athens | ( $81,413) |
| Normal | ($133,299) |
| North Chicago | ( 489,762) |
| Olney | ($240,000) |
| Palatine | ($240,000) |
| Pana | ($120,000) |
| Park City | ( $49,838) |
| Park Forest | ($157,406) |
| Peoria | ( $88,622) |
| Phoenix | ($102,900) |
| Pittsfield | ( $75,302) |
| Plano | ($211,715) |
| Posen | ($240,000) |
| Princeton | ($173,333) |
| Quincy | ($132,044) |
| Rantoul | ($232,477) |
| Raymond | ( $79,501) |
| Riverdale | ($240,000) |
| Robbins | ($240,000) |
| Rockford | ($240,000) |
| Rock Falls | ($240,000) |
| Rock Island | ($240,000) |
| Roselle | ( $61,342) |
| Rosemont | ($192,387) |
| Rosiclare | ($139,719) |
| Rossville | ($163,320) |
| Schaumburg | ( $12,164) |
| Silvis | ($214,109) |
| Skokie | ( $59,684) |
| South Beloit | ($239,994) |
| South Chicago Hts | ($240,000) |
| Spaulding | ($107,103) |
| St. Charles | ($212,583) |
| Sterling | ($239,312) |
| Streator | ($239,940) |
| Summit | ($239,903) |
| Sycamore | ($196,572) |
| Tallula | ($101,301) |
| Thornton | ($134,582) |
| Tonica | ( $21,716) |

| | |
|---|---|
| Wauconda | ($171,481) |
| Waukegan | ( $72,425) |
| Wheeling | ($240,000) |
| Wood Dale | ( $38,248) |
| Woodstock | ( $80,149) |
| Yorkville | ( $95,938) |
| Zion | ($237,714) |

## New Grants Issued in 2007 and 2008: Municipality (Grant Amount)

| | |
|---|---|
| Herrin | ( $20,000) |
| Lemont (2nd Grant) | ( $64,942) |

## Brownfield Cleanup Revolving Loan Fund:

Illinois EPA administers this fund providing loans up to $425,000 per site to municipalities to clean up former industrial sites. In 2007 and 2008, loans totaling $373,234 were granted to 2 municipalities.

## Brownfield Site Restoration Program:

This program, administered by the Illinois EPA and the Illinois Department of Commerce & Economic Opportunity, provides reimbursement to persons who voluntarily remediate brownfields if the remediation leads to a "net economic benefit."

## Brownfield Representatives:

Brownfields representatives act as a liaison for communities to various Illinois EPA technical, financial, and regulatory staff. In 2007 and 2008, representatives assisted 27 municipalities on 53 brownfields project sites.

## Targeted Site Assessments:

Illinois EPA offers limited site evaluation services to municipalities (free of charge) to determine the potential costs and to identify potential environmental obstacles for brownfields redevelopment.

## Case Study:

### *Macon County – Decatur – Archer Daniels Midland - 1150155136*

In January 2008 Archer Daniels Midland Company (ADM) submitted to the Illinois EPA an application for a Class I Non-hazardous Underground Injection Control (UIC) permit. The UIC permit application was developed as part of a large-scale injection demonstration project which will study the injection and sequestration, i.e., permanent storage of carbon dioxide (CO2), in deep saline aquifers. ADM is located at 4666 Faries Parkway, Decatur, Illinois. ADM's Decatur plant consists of various processing facilities including a corn wet milling plant with ethanol production. The CO2 that will be injected under this permit is a by-product of the ethanol plant's fermentation process.

The UIC permit application was prepared in collaboration with the Midwest Geological Sequestration Consortium (MGSC). The MGSC, led by the Illinois State Geologic Survey (ISGS), is one of seven U.S. Department of Energy (U.S. DOE) funded partnerships. These regional partnerships are studying regional geologic variations that impact the sequestration of CO2, advanced monitoring technologies, industrial reservoir models, and more recent advancements in geochemical and reservoir models. This is one of the first large-scale studies of the sequestration of carbon dioxide in the nation.

The Illinois EPA issued a Class I Non-hazardous UIC permit to ADM on December 23, 2008 for the construction of the injection well. Construction of the well began on February 14, 2009 and is expected to be completed in early May 2009. Prior to being granted authorization from the Agency to begin injection, ADM will submit a well completion report and additional information regarding construction of ancillary equipment associated with the operation of the injection well. This additional information is considered to be a major modification of the permit and will require preparation of a draft permit, public participation, and the issuance of a final permit decision.

Once authorization for injection has been granted, injection of 1,200 tons/day of supercritical CO2 may commence. A total of one million metric tons of CO2 may be injected. Supercritical CO2 refers to carbon dioxide that is above both its critical temperature of 88 F° and critical pressure of 1,070 pounds per square inch (psi). A

supercritical fluid has physical properties somewhere between those of a liquid and a gas. The well will inject supercritical CO2 at a depth located between 6,500 to 7,500 feet below ground surface into the Mt. Simon sandstone formation. The Mt. Simon formation is a deep saline aquifer basin that covers a large portion of Illinois, western Kentucky, and a portion of southwestern Indiana. The depth of the final injection point will be determined based on testing conducted during the drilling of the injection well.

Injection is expected to begin in early 2010 and continue for a period of approximately three years followed by two years of post-injection monitoring. Over the life of this project extensive monitoring of soil, air, shallow groundwater and the injection zone will be conducted. The MGSC will use this monitoring data to refine the modeling techniques used to determine how CO2 behaves following injection and to help identify effective monitoring techniques to assure that CO2 sequestration in deep saline aquifers such as the Mt. Simon formation is a safe and secure long-term solution for storage of CO2 emissions.

## Brownfield Case Studies:
### *Brookfield, IL – Lucas Tire*

In April 2003, the Village of Brookfield began the process of developing its *2020 Master Plan* to reflect changing community conditions and an emerging vision of the community's future. The *Ogden Avenue Business Corridor* was identified as a significant component of the plan due to its important anticipated role in supporting Brookfield's future community development and economic growth. This area had potential to be a focal point for community commerce, civic identity, and a regional destination.


*Lucas tire site*

In early September of 2004, the Village submitted a Municipal Brownfields Redevelopment Grant (MBRG) application for the Lucas Tire site located at the extreme western extent of the *Ogden Avenue Business Corridor*. Historical land uses of the 0.6-acre property included an automobile dealership and service center with a history of underground storage tank (UST) use and removals. This site was selected as a starting point in clearing the way for implementation of the 2020 Master Plan due to its proximity to the Burlington Northern Santa Fe Railroad Line and the Congress Park Station, both extremely important public transportation assets to Cook County and surrounding regions. Each day, approximately 150 trains pass through Brookfield. Approximately 110 of the trains are commuter trains operated Metra, the commuter rail service division of the Regional Transportation Authority. The existing rail infrastructure and its use is an established part of the Brookfield community. The Inner Circumferential Service Line proposed by Metra would run north-south along a 22-mile route to connect O'Hare and Midway airports and all Metral service lines in between. The proposed line would likely impact the area surrounding the site in question due to its close proximity to the Congress Park Station.

On January 27, 2005, the Village enrolled the Lucas Tire site into the Illinois EPA's Site Remediation Program (SRP) for technical oversight of environmental investigation and cleanup activities. Phase II investigation activities turned up a handful of volatile and semi-volatile contaminants at the site, along with arsenic. After a total expenditure of $109,456.45 in MBRG funds at the site, SRP issued approval of a Remedial Action Plan (RAP) for the site in late July of 2007.

On May 19, 2008, the Village was awarded $119,298.00 in Federal Revolving Loan Fund (RLF) monies to execute the SRP-approved cleanup plan for Lucas Tire. Remedial activities commenced in late January of 2008, and included excavation/removal of both USTs

and hydraulic lift stations. After excavation and disposal of approximately 1,060 tons of contaminated soil at the site, followed by confirmation sampling activities and the enactment of a localized groundwater use ordinance, SRP issued a DRAFT No Further Remediation (NFR) letter for the site on October 21, 2008. A FINAL NFR determination is pending placement of an engineered barrier over the site as part of the design/construction of the future development project.

The slumping economy has temporarily stymied development interest on the former Lucas Tire parcel. The Village continues to actively market the site due to its strategic location in the *Ogden Avenue Business Corridor.*

### *Rantoul, IL – One Hour Martinizing*

In an effort to rebuild and reinvent itself after the closure of Chanute Air Force Base in 1993, the Village of Rantoul has undertaken an aggressive set of initiatives to revitalize the community and bring in investors, businesses and residents. Many successful redevelopment projects have been completed on the former base, including construction of a memorial soccer complex, a family aquatic center, a bike path and a new public library.

Focus has now shifted to redeveloping the downtown area. To this end, the Village has recently established a Tax Increment Financing (TIF) district for downtown Rantoul in an effort to provide for infrastructure improvements and foster economic growth. Hoping to rejuvenate interest and spark investment in the downtown district, the Village set out to create an urban green space that was to be known as the Rantoul Downtown Square. The park was identified as a key component in reinventing downtown Rantoul and attracting new merchants and shoppers.


*One Hour Martinizing, Rantoul*

One Hour Martinizing, an approximate 1-acre former dry cleaning facility that had been vacant since 1999, was identified as the ideal location for the proposed park. It was strategically located in an Enterprise Zone near the heart of downtown Rantoul, adjacent to two (2) previously demolished buildings that the Village intended to incorporate into the layout of the central square. The property owners had offered to give the parcel to the Village; however, the real estate transaction was avoided due to the unknown extent of environmental impact at the site.

In early June of 2004, the Village applied for a Municipal Brownfields Redevelopment Grant (MBRG) to conduct environmental investigation and cleanup on the One Hour Martinizing parcel. The grant was awarded in early August of 2004, followed by enrollment of the parcel in question and the two (2) adjacent properties, into Illinois EPA's Site Remediation Program (SRP) in December of 2004. SRP provided technical review and oversight of all investigation and cleanup activities. Comprehensive investigation activities turned up elevated concentrations of the common dry cleaning solvents PCE and TCE. After a total expenditure of approximately $103,000.00 in MBRG funds, SRP issued approval of a Remedial Action Plan (RAP) for the site in late September of 2006.

In early August of 2007, the Village received approval to amend its MBRG budget by an additional $129,045.00 to execute the SRP-approved cleanup plan for One Hour Martinizing. Remedial activities commenced in late October of 2007, and included excavation and disposal of approximately 160 tons of PCE-contaminated soil at the site. The excavation activities, coupled with the installation of engineered barriers on-site and the enactment of a localized groundwater use ordinance, resulted in the issuance of a final NFR letter by SRP in mid-April of 2009.

The Village has since acquired title to the properties in question, and construction has already begun on the Rantoul Downtown Square.

*"Comes an echo on the breeze."*

# CLEAN AIR

***The Illinois EPA's Bureau of Air continues to improve Illinois' air quality through regulatory efforts and numerous other programs enlisting citizens and organizations to benefit communities, residents, and especially children.***

Air quality has been a priority in the State since the formation of the Illinois EPA in 1970. Since that time, the Agency, through its Bureau of Air, has worked to improve the overall air quality by identifying air pollution problems, and working with sources to reduce air pollution, which includes reviewing and issuing permits and inspecting facilities. IEPA also oversees the vehicle emissions testing program in the Metro-East and Chicagoland areas.

Air pollution comes from a number of sources throughout the nation. Pollution can travel from one state to another, or remain stagnant in the location it was emitted. In Illinois, the highest levels of air pollution exist in the state's largest metropolitan areas, Metro-East St. Louis and Chicago. However, those areas continue to experience an on-going trend of decreased pollution.

The Illinois EPA has worked aggressively to target all sources of pollution. For some time, the main target included major sources such as refineries and power plants and other large businesses. While those types of operations continue to be the primary focus and have had regulations tightened over the past several years, additional focus has been placed on individual contributions to air pollution. Individuals contribute to air pollution through everyday activities, especially driving.

In Illinois, vehicles are the single largest source of air pollution. Although newer vehicles run much more efficiently, there are now many more on the road. The IEPA's newest programs are addressing vehicle emissions along with other individual activities to aid in improving the State's air quality. Those programs include:

- The Green Pays on Green Days Program offers Chicago area residents the opportunity to win environmentally friendly products by pledging to take clean air actions.

AQI

AIR QUALITY INDEX

| Category & Range | What is the significance? | Actions people should take. |
|---|---|---|
| Good 0 - 50 | Air quality is good. | None. Enjoy activities. |
| Moderate 51 – 100 | Air quality is a concern for people who are unusually sensitive to air pollution. | **People unusually sensitive to air pollution**: Plan strenuous outside activities when air quality is better. |
| Unhealthy for Sensitive Groups 101 – 150 | Air quality is unhealthy for many people including active adults, people with heart or lung disease (including asthma), older adults and children. | **Sensitive groups**: Cut back or reschedule strenuous activities. |
| Unhealthy 151 - 200 | Air quality is unhealthy for everyone, especially people with heart or lung disease. | **Everyone**: Avoid strenuous activities. |
| Very Unhealthy 201 - 300 | Air quality is very unhealthy for everyone. | **Everyone**: Avoid physical activities. |

- The Illinois Clean School Bus Program provides grants to Illinois schools to clean up their diesel powered school bus fleets, pro-viding a healthier environment for the students and communities.

- Cleaner domestic fuels are becoming increasingly popular among fleet owners and individuals. The Illinois Green Fleets and Alternate Fuel Rebate Programs continue to expand and offer great incentives to those purchasing cleaner vehicles and fuels.
- The vehicle inspection and maintenance program was streamlined to incorporate advanced technology.

Individuals are now more aware of their impact on the environment than ever before. The Illinois EPA will continue to reach out to the general public; however, the principal goal is to meet national ambient air quality standards (NAAQS). Illinois officials continue to work on numerous issues to help achieve this goal, including working directly with industry or, if necessary, challenging federal proposals that may negatively impact Illinois air quality.

A federally mandated vehicle emissions testing program is part of the state's ongoing program for clean air progress in the Chicago and Metro East areas. The testing program results in a reduction of more than 12 percent in the pollutants from cars that contribute to smog in the air.

## Air Quality Improvements Continue in Illinois

The Illinois EPA continually watches air quality throughout Illinois and especially in the State's metropolitan area. A monitoring

*IEPA air monitor on roof*

network of more than 200 monitors located at 80 different sites provides data to the Agency that is documented and tracked throughout the year. 2007 and 2008 were exceptional years for Illinois, as air quality was either good or moderate at 93 percent of the time in 2007 and 96 percent of the time in 2008.

In terms of the Air Quality Index (AQI) air quality during 2007, there was one day (due to Ozone) when air quality in some part of Illinois was considered Unhealthy (category Red). There were 24 days when air quality in some part of Illinois was considered Unhealthy for Sensitive Groups (category Orange).

Comparatively, in 2008, there were no days when air quality in some part of Illinois was considered Unhealthy (category Red). There were 14 days when air quality in some part of Illinois was considered Unhealthy for Sensitive Groups (category orange). This includes the new ozone and PM2.5 AQI adjustments implemented in 2008. Had the revised AQI been in place in the prior year, it would have shown 45 Unhealthy for Sensitive Group days for 2007.

Air quality trends for the criteria pollutants are continuing to show downward trends or stable trends well below the level of the standards. Percentage changes over the ten year period 1999 – 2008 are as follows: Particulate Matter (PM10) 14 percent decrease, Particulate Matter (PM 2.5) 20 percent decrease, Sulfur Dioxide 15 percent decrease, Nitrogen Dioxide 13 percent decrease, Carbon Monoxide 47 percent decrease, Lead 18 percent decrease, and Ozone 12 percent decrease.

While annual trends show the statewide levels well below the federal standards, there are some areas of Illinois that do not meet federal air quality standards for Ozone and fine Particulate Matter. The Agency continues regulatory efforts as well as voluntary programs for businesses and individual citizens to improve air quality and bring the State in compliance with the federal standards.

## Landmark Air Emission Reduction Agreements Made Under the Illinois Mercury Rule and Clean Air Interstate Rule Show Progress

### *Illinois Mercury Rule*

- The Illinois mercury rule was final and effective in December 2007.
- The Illinois mercury rule requires greater reductions of mercury more quickly than the, now vacated, federal Clean Air Mercury Rule or CAMR.

- The Illinois Rule is based on findings that there exists mercury control technology that is both technically feasible and economically reasonable.
- Requires 90% reduction in mercury emissions from most units by July 1, 2009.
- Rule provides significant flexibility in order to reduce the costs of compliance and the risk of noncompliance for power plants.
- Mercury emissions may be reduced through the application of control technology specifically designed to control mercury (e.g., activated carbon injection), or through co-benefit from other control technologies designed to control SO2, NOx, and PM.
- **Multi-Pollutant Standards (MPS and CPS):** Companies may choose to voluntarily comply with the MPS and CPS – Ameren, Dynegy and Midwest Generation are using this method - these 3 companies represent 88% of Illinois' 17,007 Megawatts of coal-fired electric generating capacity and account for hundreds of thousands of tons of air pollution emissions each year. The MPS and CPS provide additional flexibility in regards to mercury control based on companies achieving significant reductions in the emissions of SO2 and NOx. The amount and timing of mercury reductions for those sources that opt-in to the MPS or CPS are estimated to be essentially the same, although they will not be required to comply on a 12 month rolling basis until 2015. Sources under the MPS and CPS are expected to have mercury emission reductions that exceed even the required 90% in the Illinois mercury rule after 2015 due to the co-benefit reductions achieved from the installation of new pollution controls (SCRs, scrubbers, baghouses) needed to comply with the corresponding SO2 and NOx standards.
- The rule does not allow for the trading, purchasing or the banking of mercury allowances. This ensures that the mercury reductions occur both in Illinois and at every power plant in Illinois.

## *Recent Developments*

- On July 1, 2008 several units at Midwest Generation began controlling mercury emissions – namely: Crawford units 7 and 8 and Fisk unit 19 - all in Chicago – and Waukegan units 7 and 8.
- As of July 1, 2009, nearly all coal-fired units in Illinois are now controlling mercury emissions via activated carbon injection.
- CAMR vacated: On February 8, 2008, the United States Court of Appeals for the District of Columbia Circuit vacated the United States Environmental Protection Agency (USEPA) Clean Air Mercury Rule (CAMR).
- Illinois revised the mercury rule (final May 2009) since this court action raised concerns regarding the status of certain federal provisions in 40 CFR Part 75 (Part 75) dealing with the monitoring of mercury emissions. Given the current uncertainty surrounding federal mercury monitoring provisions. We put the federal monitoring provisions into our own language and allowed sources to stack test mercury emissions (as an alternative to monitoring) for 3 years for compliance purposes.
- Shutdowns pursuant to CPS: Midwest Generation permanently shutdown Waukegan unit 6 in December 2007 and has agreed to shut down Will County units 1 and 2 on or before December 31, 2010.

## *Health Impacts of Mercury*

- Mercury is a neurotoxin. Unborn children, infants and young children are at greatest risk. Fetal exposure to excessive levels of mercury has been linked to mental retardation, cerebral palsy, lower IQ, slowed motor function, deafness, blindness and other health problems.

- Recent studies indicate that as many as 10 percent of children born in the United States have been exposed to excessive levels of mercury in the womb.
- Because of the risk mercury poses to unborn children and infants, mercury exposure is of concern for pregnant women and women of childbearing age who may become pregnant.

### *Coal-Fired Power Plants and Mercury*

- Illinois' 21 coal-fired power plants constitute the largest source of uncontrolled mercury emissions in the State. These power plants are scattered throughout Illinois, with many located near major bodies of water.
- Mercury emissions from coal-fired power plants are deposited into lakes and streams where they contaminate fish. Every lake, river and stream in Illinois is polluted and is under a fish advisory warning people not to eat the fish.
- Humans and wildlife are affected by eating contaminated fish.

### *Potential Impacts of the Illinois Mercury Rule*

- Reduced risk of mercury poisoning to public and the environment.
- Mercury reductions beyond the now vacated federal CAMR will occur more quickly. CAMR had targeted reduction in Illinois mercury emissions of approximately 47 percent by 2010 and 78 percent by 2018. Illinois rule targets mercury emission reductions of 90% by July 1, 2009.
- Reduction of mercury levels in Illinois' lakes and streams, making fish caught in Illinois waters safer to eat.
- Possible increase in tourism and recreational fishing as mercury levels drop in fish, bringing an associated positive impact to local economies and the State overall.
- Support for existing, and potential for additional jobs, resulting from the installation and operating requirements for additional pollution control devices.
- Economic modeling projects an approximate increase in residential electric bills of less than $1.50 per month, or $18 per year, or about one to two percent.
- As a result of the Multi-Pollutant Standards, also expect extremely large reductions in the emissions of SO2 and NOx. The combined reductions in SO2 and NOx are beyond that required by the federal Clean Air Interstate Rule (CAIR) for the 3 companies. Such reductions will have far reaching positive impacts to public health and the environment, not only in Illinois, but in other nearby States where these pollutants are shown to affect the air quality via interstate pollution transport. Benefits include reductions in ground level ozone, particulate matter, and acid rain; as well as visibility improvements. Particulate matter and ground level ozone are associated with premature deaths and illnesses.

## Improving Chicago's Air Quality One Action at a Time

Green Pays on Green Days was first launched in the summer of 2002 with the Illinois Environmental Protection Agency and the Partners for Clean Air joining forces to implement the program. The program is a public education effort that encourages Chicagoland residents to join the fight against air pollution by pledging to take action for cleaner air. As an additional incentive, those pledging are entered into a contest to win environmentally friendly prizes and a chance at the Grand Prize Toyota Prius.

To achieve the greatest air quality benefits, Green Pays on Green Days targets individuals in areas that do not meet national ambient air quality standards. The contest is open each summer to residents in Cook, DuPage, Grundy, Kane, Kendall, Lake, McHenry and Will counties in Illinois who commit to take one or more "green actions" to reduce air pollution.

"Green Pays on Green Days is a great way to educate individuals in the Chicago area about the impact we all have on air quality," said Director Scott. "Many people don't realize what a difference small changes in daily behavior can make."

September 2007 and 2008 were memorable times for Pamela Kazakis of Des Plaines and Leona Benak of Elk Grove Village. Both women were presented the keys to brand-new

*2008 Winner Leona Benak*

Toyota Prius' by Illinois EPA Director Doug Scott. Chicago's NBC-5 Meteorologist Brant Miller and Clean Air Superhero, Breathe Easy Man drew each of their names from a pool of finalists, awarding each of them the Grand Prize winners of Green Pays on Green Days 2007 and 2008. Both years were remarkable for the program, receiving 33,159 pledges from area residents in 2007 and 37,597 pledges in 2008.

Kazakis was one of 38 Grand Prize finalists in the Green Pays on Green Days 2007 program, while Benak was one of 44 finalists in 2008. The annual program runs each summer through early September – the primary months of the summer air pollution season. Finalist names were drawn each day the Chicago area's air quality was forecasted to be good or "Green" according to the national Air Quality Index. All finalists were chosen randomly and those in attendance for the Grand Prize drawing had a chance to win a new Toyota Prius donated by Your Chicagoland Toyota Dealers. Green Pays on Green Days is supported by financial and product contributions from numerous Illinois businesses and organizations.

The Chicago area Partners for Clean Air coalition, headed by the Illinois EPA, consists of businesses, health advocacy organizations, and government agencies committed to improving air quality through voluntary actions. The coalition implements the Air Pollution Action Day program to alert area businesses and residents when air quality levels reach unhealthy levels. For more information, visit ***www.cleantheair.org***.

## Mobile Source Programs: Grants, Rebates and More

The Illinois EPA continues to enhance existing programs and promote new initiatives for clean vehicles and fuels, and reducing emissions from conventional vehicles. These programs include the Illinois Clean School Bus Program, Illinois Alternate Fuels Rebate Program, Illinois Green Fleets Program, and the Idling Campaign.

### *Illinois Clean School Bus Program*

Since its start in 2003, the Illinois Clean School Bus Program has grown to include 85 school districts in 33 counties receiving grants to retrofit their school buses and use cleaner fuels. Over $4 million has been distributed affecting 3,182 school buses to be equipped with oxidation catalysts, particulate filters, and idling equipment, along with using biodiesel fuel. The Illinois EPA has received numerous federal grants to fund applications received from school districts.

### *Illinois Alternate Fuels Rebate Program*

The Illinois Alternate Fuels Rebate Program continued to expand. In 2008, over $700,000 in rebates were issued for E85, biodiesel, natural gas, propane, and electric vehicles. To date, over 2,400 applicants have received more than $4 million in rebates for acquiring alternate fuel vehicles.

The Illinois EPA has been promoting E85, biodiesel, and other alternate fuel to the general public. Illinois now has over 200 retail stations selling E85 located throughout the state. In addition, retail stations are selling biodiesel blends, mostly 11 percent blends (B11), with a few selling 20 percent blends (B20).

## *Vehicle Emissions Testing Program Undergoes Major Changes*

The Vehicle Emissions Testing Program plays an important role in reducing air pollution in Illinois today. Automobiles and trucks are one of the single greatest sources of air pollution in the Chicago Metro-East areas. Gasoline powered vehicles emit exhaust and carbon dioxide (CO2). Vehicle emissions are responsible for a substantial portion of NOx and other emissions that form ground-level ozone in major metropolitan areas.

Driving a malfunctioning vehicle is considered to be an Illinois citizen's "most polluting" daily activity. The Vehicle Emissions Testing Program helps to identify vehicles that do not meet federal standards and require they be repaired to improve their emissions. The program is in effect in nine Illinois counties in total, Cook, Lake and DuPage counties, much of Will county and portions of McHenry and Kane counties. In the Metro-East St. Louis region, the program is effective in Madison, St. Clair and Monroe counties.

In January of 2007, The Illinois Environmental Protection Agency (Illinois EPA) announced changes to the Vehicle Emissions Inspection Law, which took effect, the following month on February 1, 2007. Amendments to Public Act 94-526, which were signed into law in August of 2005, provided that owners of 1995 and older model vehicles were required to comply with the law, by passing the most recent emissions test. After that time, those vehicles were removed from the program.

Changes in the Vehicle Emissions Testing Program came as a result of technological advances in vehicles driving on national roadways. Beginning with 1996 model year vehicles, the United States Environmental Protection Agency required manufacturers to install standardized OBD systems on all light duty vehicles. These systems continuously monitor emissions-related components for malfunctions and/or deterioration. These systems notify the driver of a problem by activating the vehicle's "Check Engine" light before the vehicle's emissions have increased significantly. They also store this information, allowing the Vehicles Emissions Testing Program to retrieve the data in place of performing the current tailpipe and gas cap tests. OBD testing soon proved to be faster, more accurate and less expensive than exhaust testing.

*On-board diagnostic testing reduces vehicle emissions.*

In October of 2007, just a few months after changes to the law came into effect; tougher provisions were tacked onto the Public Act making it more difficult for vehicle owners to avoid getting their vehicle inspected. As current law stands today, a driver must get their vehicle tested before their vehicle registration (license plates) can be renewed. As a result of the changes, test dates are now tied to vehicle registration dates. The Secretary of State's Office includes information on vehicle renewal notices indicating whether or not a driver needs their vehicle to pass an emissions test before their renewal can be completed. After the changes were in place, many drivers were relieved that their driver's license and vehicle registration would no longer be subject to suspension for failing to get their vehicle tested.

To help ease the transition to the October 2007 enforcement mechanism, the Illinois EPA also sent out notices to drivers whose vehicles were due for testing. New yellow notices were mailed about four months prior to the expiration of the vehicle registration (license plates), thereby allowing ample time for a driver to get their vehicle tested and/or repaired before renewal.

The following year, in May 2008, the Illinois EPA announced further improvements to the vehicle emissions testing network. The advancements which included new testing sites, allowed motorists to schedule appointments with testing stations to get their vehicle tested, making it faster and more convenient for motorists to comply with vehicle emissions laws. The new testing network primarily used computerized OBD testing, which was a faster and more accurate than exhaust testing. The efficiency of OBD tests allowed the State to redesign the testing network and was estimated to reduce program costs by $30 million each year. In addition to the new testing, the upgraded network now includes "Full Service Stations," "OBD only stations," and "Air Team Appointment Only Testing Stations".

### *Illinois Green Fleets Program*

The Illinois Green Fleets Program now has over 100 designated "green fleets" throughout the state. Our green fleets have nearly 12,260 clean, alternate fuel vehicles, driving vehicles that run on natural gas, propane, E85, biodiesel (B20), electricity, hybrid-electric, and hydrogen.

For more information and application materials on the Illinois Clean School Bus, Alternate Fuel Rebate, and Illinois Green Fleets programs, to learn which school districts have received funds to clean up their school buses, which fleets are "green fleets" and using alternate fuels, and where you can find stations that sell E85 and biodiesel, go to ***www.illinoisgreenfleets.org***.

### *Idling Campaign*

The Illinois EPA continues to reach out to and educate school districts, local governments, trucking companies, and other companies with larger diesel vehicles on the benefits of not idling their trucks and buses when it is not necessary. In many cases, it is still common for diesel engines to be left running while the vehicle is parked and unattended. The Agency developed publications on the affects of idling, making a significant business and environmental case for turning off the engines when not in use. As a result, a number of businesses, local governments and school districts have developed idling policies or other voluntary efforts to reduce idling. For more information on idling, go to ***www.illinoisgreenfleets.org***.

## EMERGENCY OPERATIONS UNIT

### *2007 – 2008 Incidents*

In 2007 and 2008, Illinois EPA's Emergency Operations Unit (EOU) staff handled 1,672 and 1807 incidents respectively. These incidents were reported to the Illinois Emergency Management Agency (IEMA) which serves as the State Emergency Response Center (SERC) for Illinois.

**In 2007**, 73 incidents prompted the evacuation of 412 people, 19 of which involved 21 fatalities and 83 incidents resulting in 136 injuries. The majority of incidents were – 1491 – leak or a spill, while 36 – fire or explosion, 110 – gas or vapor cloud, and 83 – involve water contamination. **In 2008**, 82 incidents prompted the evacuation of 452 people, 12 of which involved 17 fatalities and 88 incidents resulting in 174 injuries. The majority of incidents were – 1,548 – leak or a spill, while 50 – fire or explosion, 162 – gas or vapor cloud, and 128 – involved water contamination.

### Examples of Significant Events:

### *Petroleum Pipeline Releases*

In August 2008, a 20-inch Marathon Pipeline ruptured in a rural area south of Albion (Wayne County) causing the release of approximately 250,000-gallons of crude oil. Crops, forested areas and a portion of Elm Creek were impacted. Preventative measures were installed to address the potential threat posed to the Little Wabash River and the City of Fairfield Public Water Supply's intake. Illinois EPA staff responded to the scene along with the USEPA Region 5 On-Scene Coordinator (OSC) and amongst other activities, involved in the joint assessment of wildlife and fauna impacts with the Illinois Department of Natural Resources and the US Fish & Wildlife Services.

In September 2008, a 12-inch Marathon Pipeline ruptured causing the release of estimated 78,000-gallons of diesel fuel near Ashmore (Coles County). While a portion of fuel was contained at the surface, the majority was retained in the soil. Illinois EPA staff responded to the scene, provided oversight of protection measures for the tributary to Embarras River and involved in the subsurface investigation and recovery operations with the support of USEPA Region 5 personnel.

## *Train Derailments*

During the period, several train derailments occurred. Hereafter are a few illustrative examples:

In March 2007, CSX Transportation train derailed near Alsip (Cook County) and involved several rail cars including five (5) containing phosphoric acid that prompted precautionary evacuations. Illinois EPA provided oversight of the company's response to the environmental issues.

In March 2008, a Union Pacific Railroad train derailed near West Vienna (Johnson County) when a bridge over a creek was washed out by severe flooding resulting in the release of 2000-gallons of diesel fuel and 30-tons of coal. The Illinois EPA staff responded to the scene, supervised cleanup activities and conducted monitoring for any residual fuel in the creek once the flood waters had receded.

In January 2008, a tornado caused Union Pacific Railroad locomotive and 12 railcars including two (2) tank cars to derail in Chemung Township near Harvard (McHenry County). One of the tank cars leaked a quantity of lube oil that entered the West Branch of Lawrence Creek and Piskasaw Creek. Illinois EPA staff responded to the scene and coordinated mitigation measures to reduce the impact and remediation activities with local officials and the USEPA Region 5 OSC. Staff also supervised the loading of the damaged ethyl acetate tank and shipment to its final destination in Janesville, WI.


## *Facility Fires*

In November 2007, an explosion and subsequent fire at the CWLP – Springfield coal-fired power plant in Springfield (Sangamon County) resulted in discharge of a variety of contaminants including transformer oil and fire-fighting foam to Lake Springfield. The Lake is a public water supply for the City and surrounding communities with approximately 150,000 consumers within its service area. Illinois EPA staff responded to insure continual safe drinking water and to oversee cleanup efforts. The Illinois EPA also were involved is the investigation as to the cause of the release, measures need to prevent a similar release in the future, and improvements to the facilities response to the release. This oversight prompted a review of the site's Storm Water Pollution Prevention Plan and the addition of monitoring equipment to improve day-to-day management of their Industrial Wastewater Treatment Plant.

In August 2008, a fire in a chemical reactor at the Blue Island Phenol LLC in Blue Island (Cook County) resulted in an employee injury and contaminated fire water runoff that impacted off-site areas along Homan Avenue and a stormwater retention basin that discharges to a tributary to Mosquito Creek and ultimately to the Cal Sag Channel. During the response and subsequent investigations, EOU coordinated with local officials, the Illinois Attorney General's Office and the Metropolitan Water Reclamation District of

Greater Chicago on various matters including extensive monitoring and causation analysis aimed at preventing similar occurrence in the future.

## Maritime Incidents

In February 2007, Kirby Inland Marine's M/V Kimberly Jane ran aground on the lock wall at Ohio River Lock and Dam 52 near Metropolis (Massac County). The vessel was towing a barge that contained 8,000-gallons of cumene, a flammable liquid with a variety of toxic effects. The Illinois EPA responded and coordinated containment activities and investigation with the US Coast Guard, IEMA, ING and the Kentucky Civil Support Team through the Unified Area Command in Paducah, KY. Staff consulted with IL American Water Company – Cairo to insure continued safe drinking water.

## Manufacturing Facilities Issues

In April 2007, trichloroisocyanuric acid in a hopper at the Stellar Manufacturing facility in Sauget (St. Claire County) started off-gassing that resulted in an evacuation of the facility and surrounding businesses. The Sauget Fire Department sprayed water on the hopper until the contents cooled enough to stop the off-gassing. The St. Claire County HazMat Team conducted on and off-site monitoring and facility entries to assist the company to halt the release. The Illinois EPA performed follow-up investigation as to the cause of the release, measures needed to prevent a similar release in the future, and improvements to the facility's response to any future release.

In December 2007, several hours after sodium hydroxide was mistakenly added to a batch of product at Enthone Inc. in Bridgeview (Cook County), two 55-gallon drums started off-gassing resulting in the facility and surrounding businesses being evacuated. The Bridgeview Fire Department responded to the incident. The Illinois EPA also responded to the facility and provided oversight of on-site remediation activities. Subsequent activities include directing the facility to conduct a causation analysis, develop measures needed to prevent a similar release in the future, and make improvements to the facility's response to any future release.

## Transportation Accidents

In December 2007, a 5,300-gallon gasoline tanker truck owned by Casey's General Stores, Inc. was struck by a vehicle that failed to yield at a stop light. The tanker subsequently rolled spilling its contents into an IDOT drainage ditch adjacent to the Interstate 72 westbound on-ramp in Champaign (Champaign County). The release impacted Copper Slough, caused a fish kill, and threatened Kaufman Park and several commercial properties. Illinois EPA staff responded to the scene and coordinated with the City of Champaign personnel and continue oversight of the on-going cleanup of the immediate area that poses a threat to area groundwater.

During the period, numerous vehicular accidents involved diesel fuel releases from semi-truck saddle tanks that prompted Illinois EPA response to the scene to direct cleanup of the immediate areas and any waterways impacted.

## Crude Oil Operations

During the period, the Illinois EPA also responded to several incidents primarily in the southeastern portion of the State that involved the release of crude oil and salt brine from oil pumping, flow lines and storage facilities. During the course, the Illinois EPA performed follow-up investigations as to the cause of the releases, measures by the companies needed to

prevent a similar release in the future, and improvements to their reporting and response actions to a release.

## *Agricultural Industry*

In April 2007, Rock River Logistics' delivered anhydrous ammonia to the Seward Ag Supply facility in Seward (Winnebago County). During the transfer, the hose connecting the delivery truck to the bulk tank ruptured releasing approximately 20-tons of anhydrous ammonia. The release resulted in evacuations of surrounding businesses, contamination of soil and water both on and off site, and the deaths of livestock and over 10,000 fish and mussel populations. The Illinois Department of Agriculture performed initial investigation with the Illinois EPA and the Illinois Attorney General's Office performing follow-up. Rock River Logistics has changed procedures to insure more adequate hoses are used in the future and they are currently remediating the site.

In June 2008, a valve on a 300,000-gallon livestock waste storage tank near Rockton (Winnebago County) failed and caused the release of 250,000-gallons of waste. The livestock impacted adjacent properties and also entered a tributary of Coon Creek. Illinois EPA staff responded and directed efforts to contain and recover the waste.

In November 2008, a farmer hauling trailer with 3,500-gallons of livestock waste rolled over along IL Route 40 near the Village Milledgeville (Carroll County). The resulting spill impacted the roadway and the adjacent drainage ditch. Illinois EPA staff responded to the scene and directed the cleanup of the impacted areas.

In December 2008, a catastrophic failure of a steel storage tank at the Tri-Central Coop in Ashkum (Iroquois County) caused a release of

2700-tons of 28% ammonia liquid fertilizer to adjacent farm fields, Prairie Creek and Iroquois River. Illinois EPA staffed responded to the scene, oversaw site investigations, conducted extensive water quality sampling, consulted with IL Aqua – Kankakee and City of Wilmington Public Water Supplies to insure continued safe drinking water and also assisted other State agencies.

## *Chemical Storage & Delivery Problems*

In February 2008, in the course of delivering 1,000-gallons of kerosene to the Promart Retail Gas Station, a Sunrise Ag Service Company employee dispensed the fuel into the building's sanitary service line. As a result, the kerosene entered the City of Mason City's (Mason County) sanitary sewer system and its wastewater treatment facility (WWTF). Illinois EPA staff were on-scene to assess the public sewer system, direct containment of the kerosene to the WWTF to prevent discharge to waters of the State, and to oversee subsequent cleanup efforts. The Illinois EPA also

performed follow-up investigation as to the cause of the release, measures needed to prevent a similar release in the future, and improvements by both companies to prevent recurrence at the Mason City and any other facility owned, operated and/or deliveries made to.

## *Weather Related Responses*

During the period, severe weather including ice storms, flooding and tornados caused environmental issues across the State. Where necessary, the Illinois EPA provided field



response, staffed the State Emergency Operations Center and Unified Area Command posts, monitored public water supplies and

wastewater treatment facilities, facilitated prompt debris disposal, coordinated with other State agencies, and for Federal declared disaster counties, coordinated with USEPA Region 5 on the debris assessment, pickup and disposal of abandoned containers.

## *Illinois EPA Division of Laboratories Provides Environmental Sample Analysis*

The Illinois EPA environmental laboratory, located in the Southern Illinois University School of Medicine complex in Springfield supports the Agency's three Bureaus by performing analyses of samples taken by field personnel, as well as analyzing required samples from many public water supplies in the state. The Division of Laboratories also administers an environmental laboratory accreditation program that oversees standards for private facilities across the state.

Analysis is done for inorganics, organics, biological materials and metals using sophisticated equipment that can measure as low as parts per billion. Data can be transmitted electronically through the Laboratory Information Management System (LIMS).

In each of 2007 and 2008, more than 350,000 analyses were done by the Illinois EPA lab in Springfield.

*IEPA labs analyze thousands of samples each year.*

# ENFORCEMENT PROGRAM HELPS INSURE LAWS TO PROTECT THE ENVIRONMENT ARE CARRIED OUT

The Illinois EPA Division of Legal Counsel works with other Agency staff to enforce state and federal laws protecting the environment, including making referrals to the Illinois Attorney General's Office for actions before the Illinois Pollution Control Board or state courts that potentially can result in penalties,

and working with the Attorney General's Office on negotiating Supplemental Environmental Projects that range from environmental protection and conservation projects benefitting local communities to installing additional pollution control equipment at a facility. Agency attorneys also work with agency staff on compliance and rulemaking procedures.

In 2007, a total of 152 cases were referred to the Attorney General and 163 enforcement orders were finalized, with penalties totaling $2,842,635 and $1,572,865 worth of SEPs.

One of the more significant orders was entered on January 10, 2007 by the Circuit Court for Rock Island County requiring that IBP (Iowa Beef Processors) pay a civil penalty in the amount of $30,000 and fund six supplemental environmental projects that total $995,000 in resolution of the State's enforcement case alleging violations of the statutory prohibition against causing, threatening or allowing air pollution resulting from odor generated by IBP, inc. during beef processing operations. Of the total SEP amount, $200,000 will be distributed equally to the Illinois EPA Special State Projects Trust Fund and the Attorney General State Projects and Court Ordered Distribution Fund. In addition, $600,000 will be allocated to fund the installation of idling reduction technology on Tyson-leased diesel trucks. The remaining $195,000 will be allocated to fund environmental initiative projects for Rock Island County Schools, the construction of a Quad City Botanical Center garden for children, and environmental remediation work at the Bass Street Landing Brownfield site, located in Moline, Illinois. Further, IBP must install two scrubbers, which total approximately $748,000 to control odor generated during rendering operations and apply for and obtain the requisite State permits issued by the Illinois EPA authorizing the construction and operation of such equipment.

Other major cases resolved in 2007 included a penalty of $66,000 and a SEP of $500,000 for Bunge North America and a penalty of $35,000 and a SEP of $20,000 for First Rockford Group.

On January 17, 2007, U.S. District Court for the Central District of Illinois entered a Consent Decree, filed by the Department of Justice ("DOJ"), in resolution of violations alleging that Bunge violated federal Prevention of Significant Deterioration ("PSD") requirements and the federal Clean Air Act by modifying 11 oilseed and grain processing facilities located in 8 states without first applying for and obtaining the requisite PSD approval permits and/or installing best available control technology ("BACT"). One oilseed processing facility, located in Cairo, Illinois and one combined oilseed/corn dry mill processing complex, located in Danville, Illinois, are the subject of the national settlement. The Government alleges that increases in volatile organic compound ("VOC") emissions triggered the requirement to install BACT. The Consent Decree requires that Bunge pay a civil penalty of $625,000 divided between the United States and the various participating states. Of the total civil penalty amount, $361,000 will be paid to the United States. The remaining $264,000 will be distributed among the participating states determined by the number of facilities located within each state. As three processing facilities are located in Illinois, the civil penalty amount allocated to the State of Illinois is $66,000. In addition, Bunge will fund various supplemental environmental projects to facilitate hazardous material training and the purchase of equipment by emergency responders located in Alexander, Vermillion, and Pulaski counties, and lead abatement activities in the City of Danville, that total $500,000. Additional "community based" SEPs will be performed in Louisiana, Indiana, Ohio, Kansas, Mississippi, Iowa, and Alabama at an additional cost of $750,053. Further, Bunge must install air pollution control equipment equivalent to BACT and apply for and obtain the requisite permits issued by state permitting authorities to incorporate revised emission limits and authorize the installation of such equipment. The national settlement will result in total combined VOC, SO2, NOx, and CO emission reductions of 1,400 tons per year.

On July 12, 2007, the Illinois Pollution Control Board entered an order involving First Rockford Group's ("FRG's") construction of potable water lines at its Golf Hill subdivision

in Cherry Valley, Winnebago County, without first obtaining an Illinois EPA construction permit for the work, and various construction site stormwater and erosion control violations at three adjoining subdivision developments controlled by FRG in Machesney Park, Winnebago County. FRG obtained a potable water line construction permit after work had commenced on the Golf Hill project. FRG improved erosion control measures at its Machesney Park developments and ownership of substantial portions of those projects have since been transferred to third parties. FRG has agreed to pay a $35,000 civil penalty for the past violations, as well as provide $20,000 to the Rockford School District as a SEP for the School District to purchase and install fine particulate air filters on its buses to improve exhaust emissions from those vehicles.

In 2008, there were 174 referrals to the Attorney General's Office and 144 orders were entered involving total penalties of $4,689,286 and SEPs of $816,341.

Significant cases resolved included a penalty of $378,600 and a SEP of $225,000 from Equistar Chemicals, LP, a penalty of $258,400 and a SEP of $200,000 from Oldcastle APG Northeast, Inc. and a penalty of $110,000 and SEP of $100,000 from Toll Brothers Homes, Inc.

On January 28, 2008, the United States District Court for the Northern District of Illinois entered an order regarding Equistar Chemicals, LP, for causing or allowing a release of 42,000 lbs. of hydrocarbons from the facility's olefins unit, and causing or allowing the emission of smoke with opacity greater than 30 percent. The Illinois EPA requested that Equistar install redundant instrumentation and control to prevent future flaring incidents. The Illinois EPA also requested the imposition of a civil penalty of $20,000.

At the request of the USEPA and the Department of Justice, Illinois agreed to participate in the federal-lead action for violations of federal regulations regarding ozone depleting substances, National Emission Standards for Hazardous Air Pollutants (NESHAP) for benzene waste operations, federal standards for leak detection for synthetic organic chemical manufacturers, New Source Performance Standards for synthetic organic chemical manufacturers, Comprehensive Environmental Response, Compensation, and Liability Act, Emergency Planning and Community Right-to-Know Act, Clean Water Act, Resource Conservation and Recovery Act, and the State Implementation Plan of Illinois. Equistar committed to enhanced monitoring of various equipment and facility components, third party audits of various compliance procedures, installation of additional controls on benzene wastewater streams, implementation of a flaring minimization program, and enhanced reporting of spills and releases of contaminants. Additionally, for its facility in Morris, Illinois, Equistar agreed to modify its CAAPP permit to include the federal requirements for synthetic organic chemical manufacturing and undertake enhanced sampling of its cooling tower water systems. Equistar paid a civil penalty of $1,964,200, of which $178,000 was paid to the Illinois Environmental Protection Trust Fund, and performed SEPs valued at $6,585,000 with the State of Illinois SEPs having a value of $225,000. The SEPs comprised the donation of a biodiesel fuel-compatible school bus meeting the EPA emissions criteria for 2007 models to the Minooka Community School District, the donation of emergency response equipment to the Will County Emergency Management Agency, and a donation to the Illinois EPA's Clean School Bus Program.

On June 11, 2008, the Circuit Court for Winnebago County entered a Consent Order in the case of Oldcastle APG Northeast, Inc., filed by the Attorney General's Office, in resolution of violations of the Act and Pollution Control Board regulations resulting from the excess emission of Volatile Organic Materials (VOM) generated during masonry block manufacturing operations, and relocating emissions sources and air pollution control equipment without first applying for and obtaining the requisite State construction permit. The masonry block manufacturing facility that is the subject of the settlement is located in South Beloit, Illinois. The Illinois EPA alleges the excess emission of VOM generated by Oldcastle required that the facility apply for and obtain a Clean Air Act

Permit Program Permit. Additionally, the facility was required to timely submit complete annual emission reports accurately reflecting VOM emissions. The Consent Order requires that Oldcastle pay a civil penalty in the amount of $258,400. Of the total civil penalty amount, $13,400 will be paid to the Illinois EPA representing avoided fees. In addition, Oldcastle will fund a supplemental environmental project ("SEP") to further diesel emission reduction activities, from existing diesel engines including, heavy duty trucks, marine engines, locomotives, non-road engines and school or transit buses totaling $200,000. Given block manufacturing operations located at each facility that is the subject of the enforcement case have ceased, the Consent Order does not require that Oldcastle obtain the requisite Clean Air Act Permit Program permit issued by the Illinois EPA.

On October 9, 2008, the Lake County Circuit Court entered an order in the Toll Brothers Homes, Inc. case. Toll Brothers, Inc. ("TB") mass graded a 300+ acre site at one time for a residential home development in Hawthorn Woods, Lake County and failed to provide adequate erosion controls and temporary stabilization in areas of the site to be built out in subsequent phases. This resulted in very heavily silt-laden stormwater runoff from the site discharging to Indian Creek and turning it opaque and causing a silt plume in Countryside Lake, to which Indian Creek is a tributary waterway. Toll Brothers also constructed a potable water line on site without first obtaining a construction permit from the Illinois EPA. Toll Brothers subsequently improved its erosion controls and stabilized portions of the site to be built out at a later date, ceasing the silt-laden stormwater discharges to Indian Creek. It obtained an as-built construction permit for the potable water line in question. Toll Brothers will provide $100,000 in SEP dollars to Lake County for it to disburse to the Countryside Lake Association ("CLA") once the CLA completes a shoreline restoration project along a portion of Countryside Lake, in lieu of attempting to dredge out solids from the lake that might have been attributable to its poor erosion control measures. Finally, Toll Brothers has agreed to pay a $110,000 total civil penalty for its past violations in this matter, with $80,000.00 going to the ETPF and $30,000 going to Lake County.

Copies of Illinois environmental enforcement orders back to 2002 can be viewed on the Illinois EPA web site at ***www.epa.state.il.us/enforcement/orders/***

## New Illinois Environmental Laws Enacted in 2005-2006

### *State Environmental Legislation Approved in 2007*

*New laws targeted mercury and phosphorus, provide financing alternative for underground storage tank cleanups, monitoring chemicals in the body, facilitate FutureGen clean coal project, and solid waste facility siting modifications*

**P.A. 95-87/HB 943.** *Signed into law on August 13, 2007; effective August 13, 2007*, amends the Mercury Fever Thermometer Prohibition Act and changes the title of the Act to the Mercury-added Products Prohibition Act. On or after July 1, 2008, it prohibits anyone from selling or distributing certain measuring devices that contain mercury. The law also authorizes Illinois EPA to provide exemptions to the sales ban based upon a finding that a system exists for the proper collection and processing of the mercury-containing device at the end of its useful life and that one of the following applies: 1) technically feasible non-mercury alternatives are not available at a comparable cost; or 2) the use of the device provides a net benefit to the environment, public safety, or public health when compared to non-mercury alternatives.

**P.A. 95-452/SB 1241.** *Signed into law on August 27, 2007; effective August 27, 2007*, amends the Environmental Protection Act. Beginning July 1, 2008, prohibits sale of mercury thermostats for use in both new construction as well as replacement devices in existing buildings. Also removes the date by which manufacturers must apply for an exemption from the sales ban on mercury switches and relays that goes into effect July 1, 2007.

**P.A. 95-115/SB 376.** *Signed into law on August 13, 2007; effective August 13, 2007,* creates the Regulation of Phosphorus in Detergent Act. Beginning July 1, 2010, makes it illegal to use,

sell, distribute, or manufacture any cleaning agent containing more than 0.5% phosphorus by weight. Requires the Illinois Pollution Control Board (IPCB) to promulgate rules governing the exception process and administration and enforcement of the bill.

**P.A. 95-403/HB 277.** *Signed into law on August 24, 2007; effective August 24, 2007*, amends the Environmental Protection Act regarding the Illinois EPA's Leaking Underground Storage Tank (LUST) program. Where the Illinois EPA has established a LUST reimbursement payment priority list (which it already has done), authorizes LUST tank owners/operators to assign the amount of reimbursement they are owed from the State's LUST Fund to a bank, financial institution, lender, or other person that provides factoring or financing to tank owners/operators or their consultants, in order to be paid a percentage (to be agreed upon between the tank owner and the lender/bank/other person) by the lender/bank/other person now, rather than wait for the Agency to pay the tank owner/operator directly. The lender/bank/other person would then wait the approximately 12-15 months it currently takes the State to pay the reimbursement claim from the Agency's LUST Fund. Prohibits the lender/bank/other person from appealing the amount of the LUST reimbursement, or from assigning the reimbursement to yet another party.

**P.A. 95-74/HB 680.** *Signed into law on August 13, 2007; effective January 1, 2008*, creates the Biomonitoring Feasibility Study Act. Authorizes the University of Illinois at Chicago (UIC), and

*The Illinois Statehouse where laws are made*

the Great Lakes Center for Occupational and Environmental Safety and Health to conduct a feasibility study on how best to monitor the presence and concentration of designated chemicals in the bodies of Illinois residents. Requires the Directors of the Department of Public Health (IDPH) and the Environmental Protection Agency (Illinois EPA) to establish a scientific guidance panel to provide guidance and recommendations regarding the design and implementation of the feasibility study, including specific recommendations for chemicals that are priorities for biomonitoring. Establishes criteria to be used by the panel for recommending priority chemicals, and for recommending additional chemicals. Requires UIC to submit a draft report for review and comment by the guidance panel and the public two years after the effective date of the bill, containing the findings and recommendations of the study. Requires the report to be revised taking into consideration the comments received by and the recommendations of the guidance panel, and the final report be submitted to the Governor and the General Assembly.

**P.A. 95-18/SB 1704**. *Signed into law on July 30, 2007; effective July 30, 2007*, creates the Clean Coal FutureGen for Illinois Act. Provides the FutureGen Alliance with adequate liability protection and permitting certainty to facilitate the siting of the FutureGen Project in Illinois. The bill contain provisions concerning transfer of title to sequestered gas and associated liabilities to the State; insurance and indemnification by the State for the operator (the FutureGen Alliance) for certain liabilities; permits; land use; and economic incentives.

Amends the Court of Claims Act and the State Lawsuit Immunity Act concerning jurisdiction. Provides that the State's Court of Claims has jurisdiction concerning any public liability actions arising under the bill, except that such an action may be brought in circuit court if the cause of action is one of personal injury or wrongful death where such injury or death was proximately caused by the storage, escape, release, or migration of any post-injection sequestered gas that was injected during the operation of the facility.

Also amends the Department of Commerce and Economic Opportunity Law and the Illinois Enterprise Zone Act concerning financial

assistance and high impact businesses. Provides that the two locations currently under consideration in Tuscola and Mattoon are the only locations eligible for benefits under the bill. Exempts the operator of the facility from any taxes imposed by the State upon the nameplate capacity of the facility's generating units.

Requires the Department of Natural Resources' (DNR) State Geological Survey to monitor, measure, and verify the permanent status of sequestered carbon dioxide (CO2) and co-sequestered gases in which the State has acquired the right, title, and interest under the bill.

Specific to the Illinois EPA, the bill requires the State of Illinois to be responsible for any remediation actions necessary in the event of future contamination potential that may exist as a result of the sequestered gas. The language attempts to define certain activities and subjects, limit liabilities, grant land use rights, and provide "permit certainty" for the FutureGen Alliance. Requires the State to streamline the permitting process, and to allow the operators of the facility to combine permit applications where appropriate.

The legislation contains a severability clause and also contains a repeal date of December 31, 2010 unless the FutureGen project is located in either Tuscola or Mattoon.

Several bills were passed and signed into law that made modifications regarding the siting of various types of solid waste disposal and pollution control facilities. They included:

**P.A. 95-131/HB 937.** *Signed into law on August 13, 2007; effective August 13, 2007.* Amends the Environmental Protection Act and exempts from the local siting process any wood-fired incinerator facility used for energy recovery. The proposed facility, to be located in the Village of Robbins on the site where the former Robbins waste incinerator was operated as an energy recovery facility, could only accept clean wood approved by the Illinois EPA for fuel. Finally, this bill contains a geographic limitation so that only the proposed Robbins facility would qualify for the new siting exemption.

**P.A. 95-177/HB 3638.** *Signed into law on August 14, 2007; effective January 1, 2008*, amends the Environmental Protection Act and excludes from the local siting approval process those sites or facilities that hold no more than 500 gallons of non-petruscible solid waste in transit for 10 days or less, provided that such waste will be further transferred to a recycling, disposal, treatment, or storage facility on a non-contiguous site that complies with all applicable 10-day transfer requirements of the federal Resource Conservation and Recovery Act (RCRA) and the U.S. Department of Transportation's (USDOT) hazardous material requirements. The amendment also defines "non-petruscible solid waste" as waste other than garbage that does not rot or become putrid, including but not limited to paints, solvents, filters, and absorbents.

**P.A. 95-288/HB 316.** *Signed into law on August 20, 2007; effective August 20, 2007*, amends the Environmental Protection Act and makes two clarification changes to the local siting law.

First, the bill clarifies that the proper governing body (municipality if located in an incorporated area, or county board if located in an unincorporated area) to determine whether or not siting shall be granted for any new or expanded pollution control facility (landfill or waste transfer station) shall be the governing body in which the facility is to be located at the time the siting application is filed.

Secondly, the bill would clarify that compliance with the required setback provisions for any new or expanded waste transfer station only is to be determined based on the date the siting application is filed.

## *Other environmental legislation this year included:*

**P.A. 95-453/SB 1242.** *Signed into law on August 27, 2007; effective August 27, 2007*, creates Illinois Cool Cities Act. It requires the Illinois EPA to provide technical assistance, if needed, to units of local governments that have endorsed the U.S. Conference of Mayor's Climate Protection Agreement. Specifies that the technical assistance include support in the preparation of an inventory of greenhouse gas (GHG) emissions and an assessment of the emission reduction benefits of methods to reduce greenhouse gases. Requires the Illinois EPA to designate local governments as an "Illinois Cool City" upon a finding that their GHG reduction plans accurately estimate emission reduction benefits and there is evidence of commitment by the local government to implement the plan.

**P.A. 95-66/HB 516.** *Signed into law on August 13, 2007; effective August 13, 2007.* Amends the Environmental Protection Act and with regard to the nuclear power plant inspections that both Illinois EPA and the Illinois Emergency Management Agency (IEMA) are required to conduct, deletes the provision allowing self-inspection by the owner or operator of the nuclear power plant in lieu of the inspections by the two agencies.

**P.A. 95-104/HB 1460.** *Signed into law on August 13, 2007; effective January 1, 2008.* Amends the Government Buildings Energy Cost Reduction Act of 1991 and requires all buildings owned or leased by the State that are 1,000 square feet or larger to use Energy Star labeled light bulbs. Authorizes owners of buildings that are required to use Energy Star labeled light bulbs to deplete their supply of non-Energy Star light bulbs. Provides for the proper disposal of used light bulbs. Excludes certain historic buildings from the provisions of the Section.

**P.A. 95-121/HB 496.** *Signed into law on August 13, 2007; effective August 13, 2007.* Amends the Environmental Protection Act. Excludes reclaimed asphalt pavement (RAP) from being considered "speculatively accumulated" if all of the following conditions are met: 1) the RAP is not mixed with waste or other clean construction or demolition debris; 2) the RAP is returned to the economic mainstream within 4 years; 3) at least 25% of the stored RAP is removed from the site each year; and 4) if the RAP is being used as fill material, the RAP cannot be placed above grade.

**P.A. 95-132/HB 987.** *Signed into law on August 13, 2007; effective January 1, 2008.* Creates the Wabash and Ohio Rivers Coordinating Council Act and a coordinating council that would shepherd financial and other resources to the Wabash and Ohio River basins. The Council would be composed of 13 members with the Lieutenant Governor acting as the chairman. Additional non-voting members could also be placed on the Council. All members, except the Lieutenant Governor, would be selected by the Governor from a specific list of state agencies and departments, businesses, and natural resource groups. Council duties would include: 1) reviewing state and federal activities within the basin; 2) working with local communities to address watershed and water resource concerns that lead to the protection, restoration, and expansion of critical habitat, soil conservation, and water quality; 3) optimizing state and federal fund expenditures; 4) making recommendations to coordinate the expenditure of state and federal funds; 5) encouraging local communities to develop water management plans to address stormwater, erosion, flooding, sedimentation, and pollution problems, and encouraging natural conveyance, flood water storage, and enhancement of habitat and recreation, the preservation of farmland, prairies, and forests, and the use of measurable and compatible economic development; and 6) identifying possible sources of additional funding.

**P.A. 95-238/HB 375.** *Signed into law on August 20, 2007; effective August 20, 2007.* Creates the Great Lakes-St. Lawrence River Basin Water Resources Compact Act. Authorizes the Governor to enter into the Compact and provides that the Compact is an agreement between the states of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, and Pennsylvania. Sets forth the jurisdiction, organization, powers, and purposes of the Council. Sets forth the purposes of the Compact, including the protection and conservation of waters and water dependent resources and the promotion of interstate and state-provincial comity. Requires the Illinois Department of Natural Resources (DNR) and other state agencies to perform, at the direction of the Governor, the functions and duties required of Illinois under the Compact. Provides that all appointments by the Governor under the Compact are subject to the advice and consent of the Senate. Identical to SB 50 (Cullerton/Osterman).

**P.A. 95-139/HB 1780.** *Signed into law on August 13, 2007; effective January 1, 2008.* Amends the State Finance Act. Changes the names of the Conservation 2000 Fund and Conservation 2000 Projects Fund to the Partners for Conservation Fund and the Partners for Conservation Projects Fund. Authorizes use of the funds by the Departments of Natural Resources (DNR) and Agriculture, as well as the Illinois EPA, for planning, preservation, and water protection, to partner with private landowners, government, and not-for-profit organizations, and to pay personnel and other costs. Eliminates the Department of Transportation (IDOT) as a forth state agency authorized to use funds. Provides that the Partners for Conservation Fund be supported by monthly transfers from GRF totaling $14 million per year

through 2021 (now, 2009). Of this total, the Illinois EPA receives $1.6 million per year to fund its Illinois Clean Lakes program, Priority Lake and Watershed Improvement program, and its Lake Education Assistance program

**P.A. 95-268/SB 303.** *Signed into law on August 17, 2007; effective January 1, 2008.* Creates the Plastic Bag Recycling Act and the Plastic Bag Recycling Task Force and creates a mandatory plastic bag recycling pilot program for certain retailers of Lake County. Sets out the composition and duties of the Task Force. Requires the Task Force and the Illinois EPA to collaborate on a report to be submitted to the Governor and the General Assembly on specified aspects of the pilot program, and repeals the provisions of this bill on June 1, 2010.

## *State Environmental Legislation Approved in 2008*

***New state laws regulate electronic waste disposal, promote green practices and environmental site cleanups***

**P.A. 95-959/SB 2313 (Garrett/Nekritz).** *Signed into law on Sept. 17, 2008; effective Sept. 17, 2008.* Creates the Electronics Products Recycling and Reuse Act. Requires electronics manufacturers to collect and recycle or process for reuse residential televisions, printers, computer monitors, computers, laptop computers and printers (collectively known as "covered electronics devices," or CEDs), and other "eligible electronics devices" (EEDs) at no charge to consumers. Beginning January 1, 2010, requires manufacturers to achieve their fair share of a statewide goal based upon their portion of new sales (called "market share" – applies to television manufacturers) or their share of electronics that are recycled/processed for reuse (called "return share" – applies to computer manufacturers).

Authorizes electronics manufacturers to use any strategy they like to meet their goals, e.g., partnering with retailers and local governments; sponsoring collection events, or collection facilities. In order to encourage electronics collection options in parts of Illinois that are underserved by collection facilities, provides manufacturers with a double credit (2 pounds for every pound collected) towards meeting their goals by collecting electronics in these areas. Manufacturers could also earn double credits by processing for reuse (rather than recycling) CEDs, and triple credits when CEDs are donated for reuse to a primary or secondary public school or a 501(c)(3) not-for-profit entity that serves low income children and families or the developmentally disabled.

Requires manufacturers to ensure that those recyclers and refurbishers used to meet the manufacturers' goals adhere to a minimum set of standards, including, but not limited to, standards addressing environmental and worker safety, liability insurance, and international export of used electronics.

Requires CED manufacturers, recyclers, refurbishers, and collectors to register annually with the Illinois EPA. Annual registration fees for manufacturers would be $5,000. Participating recyclers/refurbishers would pay a flat annual fee of $2,000. These registration fees would be indexed for inflation. Additionally, the fee structure is designed to cover the Illinois EPA's estimated annual costs to administer this law (roughly $650,000).

Beginning January 1, 2012, or the third year of the program, landfills would be prohibited from knowingly accepting any CEDs for disposal. This includes televisions, computers, printers, and computer monitors (both residential and non-residential). The burning or incineration of televisions, computers, printers, and computer monitors would also be prohibited.

The bill also creates penalties for violations of the new Electronics Products Recycling and Reuse Act this bill would create. The manufacturers' goals would not be enforced during the first two program years. Establishes penalties for violations by recyclers and penalties when manufacturers fail to report to Illinois EPA one-time only.

Beginning on April 1, 2012 but no later than December 31, 2013, the Illinois Pollution Control Board is authorized to review temporary CED landfill ban waiver petitions for county governments or municipal joint action agencies, and determine whether the respective county's or action agency's jurisdiction may be granted a temporary landfill ban waiver due to a lack of funds and lack of collection opportunities to collect CEDs and EEDs within the county's or action agency's jurisdiction. Further authorizes the Pollution Control Board to grant such waivers.

Lists specific items that a landfill waiver petition from a county or action agency must include.

**P.A. 95-741/HB 4159.** *Signed into law on July 18, 2008; effective July 18, 2008.* Amends the Illinois Solid Waste Management Act. Provides that school districts review their procurement procedures and give preference to products and supplies containing the highest amount of recycled material, where economically and practically feasible. Requires each school district to develop a comprehensive waste reduction plan to provide for the recycling of marketable materials present in the school's waste stream and be designed to achieve at least a 50% reduction in the amount of solid waste generated before July 1, 2020. Requires the plan to be updated every 5 years.

**P.A. 95-743/HB 5930.** *Signed into law on July 18, 2008; effective January 1, 2009.* Amends the Government Buildings Energy Cost Reduction Act of 1991. Requires the use of Energy Star lights or LED lights (now, Energy Star lights) in state-owned or leased buildings of 1,000 square feet or larger.

**P.A. 95-749/HB 271.** *Signed into law on July 23, 2008; effective July 23, 2008.* Creates the Promote Illinois Ethanol and Biodiesel Act. Subject to appropriation, requires the Internet websites of all state agencies to include hypertext links to websites containing information on ethanol and biodiesel fuels. Authorizes state agencies to provide links on their websites to Illinois agricultural or health related organizations; and national agricultural, renewable fuel, or health related organizations.

**P.A. 95-824/HB 4129.** *Signed into law on August 14, 2008; effective August 14, 2008.* Amends the Private Sewage Disposal Licensing Act. Upon this bill becoming law, requires the Department of Public Health (IDPH) to evaluate each "experimental use permit" [as defined in 77 Ill. Adm Code 905.20(m) and (n)] for compliance with the conditions set forth for each permit. Prohibits IDPH from issuing any more experimental use permits. Instead, requires the Department to authorize the use of appropriate new innovative wastewater treatment systems on a site specific basis. Authorizes IDPH to review alternative technologies from other states.

**P.A. 95-845/SB 2110.** *Signed into law on August 15, 2008; effective January 1, 2009.* Creates the Uniform Environmental Covenants Act (UECA). Creates an interest in real estate called an "environmental covenant" that assures a plan of rehabilitation for contaminated real property (brownfields) and controls the use of the property. An environmental covenant may be separately conveyed to and enforced by a relevant third person called a holder. An underlying plan between the State or federal government and the landowner for remediation of the property would have to be in place for an environmental covenant to be created and conveyed.

The bill provides for the creation of such a covenant, its termination when appropriate, priority over other real estate interests, and enforcement over the time the covenant is in place. An environmental covenant would be perpetual unless a specific term is prescribed in the instrument creating it. The interest would have to be recorded in the real estate records.

**P.A, 95-919/SB 2034.** *Signed into law on August 26, 2008; effective August 26, 2008.* Amends the Private Sewage Disposal Licensing Act. Allows units of local government to require homeowners who maintain private sewage disposal systems within their jurisdiction to provide verification, no more than once every 3 years, of a valid maintenance contract with a licensed private sewage disposal system installation contractor. Specifically prohibits the local government from charging the homeowner any additional fee for such verification.

## HEADQUARTERS

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Springfield, Illinois 62794-9276
217-782-3397

## FIELD OFFICES

2125 South First Street
Champaign, IL 61820
217-278-5800
2009 Mall Street
Collinsville, IL 62234
618-346-5120

595 South State
Elgin, IL 60123
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P.O. Box 767
Elk Grove, IL 60009
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12 Gunia Drive, Suite 2
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815-223-1344

2309 W. Main Street
Marion, IL 62959
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9511 W. Harrison Street
Des Plaines, IL 60016
847-294-4000

(Bureau of Air, Water)
5415 North University
Peoria, IL 61614
309-693-5463

(Bureau of Land)
7620 North University, Suite 201
Peoria, IL 61614
309-693-5462

4302 North Main Street
Rockford, IL 61103
815-987-7760

## Notice of Nondiscrimination

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