To Provide and Maintain a Healthful Environment

BIENNIAL REPORT 2011-2012

September 2013

Illinois
Environmental
Protection Agency

State of Illinois
Illinois Environmental Protection Agency
www.epa.state.il.us

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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

TO PROVIDE AND MAINTAIN A HEALTHFUL ENVIRONMENT

Illinois Environmental Protection Agency

Biennial Report, 2011-2012
September 2013

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

Contents

Contents

MESSAGE FROM THE DIRECTOR

This is the fifth Biennial Report from the Illinois Environmental Protection Agency, providing an overview of the Agency's work during 2011 and 2012. The purpose of these reports is to inform the citizens of Illinois of the progress being made in our state to protect our air, land and water resources and the specific activities of Illinois EPA to further our mission of protecting the environment and human health. It also highlights our efforts to involve communities and make environmental information more accessible to citizens and encourage everyone to take responsibility for good environmental practices. As you can see in this report, Illinois EPA relies on cooperation and partnerships with the regulated community, local governments, citizen organizations and others to meet our responsibility to implement and administer state and federal environmental laws and regulations because as is stated in our Illinois Constitution, "each person has the right to a healthful environment." Illinois EPA is also appreciative of the strong support and longtime dedication to environmental protection of Governor Pat Quinn. I would like to highlight some of the major accomplishments in 2011-2012:

Permit Streamlining and Regulatory Reforms

In 2011, the Agency successfully negotiated with business and industry groups a comprehensive environmental permit streamlining bill enacted by the Illinois General Assembly and signed into law by Governor Quinn. It includes improvements and changes to Illinois EPA procedures that will reduce the burden on the regulated community while still protecting the environment. Those changes include more "general" permits for the construction, installation or operation of categories of facilities as well for classes of facilities or equipment. It also required Illinois EPA to develop a web portal for a one-stop shop for permit applicants to submit many applications online, track the status of pending applications, and find detailed technical guidance documents and permit application checklists. This will help applicants to submit sufficient and complete permit applications, saving time and resources for both them and Illinois EPA permit review staff. The environmental permitting portal was launched on the Illinois EPA website in January 2012, ahead of the statutory deadline

Illinois EPA and Governor Quinn are committed to growing jobs in Illinois by making timely permit decisions through more lean and efficient processes and doing a better job of assisting companies looking to locate or expand in our state with meeting their environmental regulatory obligations.

During 2012, Illinois EPA launched an initiative to greatly increase transparency and online access for both the public and the regulated community by providing direct electronic access to thousands of agency documents through the use of DocuWare and GIS technology. When fully implemented, it will also enable the public to avoid having to submit formal Freedom of Information Act requests in many cases, enabling Agency FOIA staff to respond more promptly to other requests.

In 2011, the Agency successfully negotiated legislation signed into law by Governor Quinn in August 2011 that strengthened the Compliance Commitment Agreement (CCA) process to resolve environmental violation notices issued by the Agency. It provides more certainty to entities that voluntarily follow through on correcting environmental problems by making the agreements enforceable through civil penalties. If a violator declines to enter into a CCA, as under prior law, the Agency may refer the violations to the Illinois Attorney General for formal enforcement. The legislation also made compliance under a CCA now qualify under USEPA's requirement as formal enforcement action.

Clean Water

In October 2012, Governor Quinn launched a $1 billion Illinois Clean Water Initiative (CWI) which is providing a greatly expanded number of affordable loans for communities across the state to move forward on constructing vitally

needed drinking water and wastewater infrastructure projects, including new or replacement water mains, upgraded drinking water treatment plants, sewer replacement or expansion and upgraded wastewater treatment facilities. In some communities, water mains that are more than a century old and have numerous leaks and waste of water are now being replaced thanks to the CWI. Addressing aging sewers and treatment plants is reducing pollution to rivers and other waterways that are the anchors for many Illinois cities and towns. The program is also creating thousands of additional well-paying jobs for the construction and related trades, further boosting local economies. At the same time by using bonding based on repayment of the loans, the initiative does not require any additional state operating funds or general obligation debt. A list of loans and projects for 2011 and 2012 is included in this report.

In 2011, the first set of Illinois Green Infrastructure Grants (IGIG) were awarded by Illinois EPA to local governments and organizations for innovative stormwater management projects. These "Best Management Practices" projects use sustainable green techniques to reduce stormwater runoff, such as in areas where combined sewer overflows are a problem. The first 14 projects were awarded in 2011 for a total of $5 million and an additional $4.3 million in projects were funded in 2012, with strong interest from applications throughout the state.

A significant new law to help prevent groundwater contamination was passed in 2012 that resulted from negotiations between Illinois EPA, the drycleaning industry and environmental advocates over a two-year period. It imposes more stringent regulations on the use of perchloroethylene or "perc" used by drycleaners. It requires primary and secondary control systems and more stringent training, record-keeping and safety practices in the transportation, handling and disposal of perc. The Agency believes this law will significantly reduce the potential for additional groundwater contamination from the chemical, which has been an increasing problem as a result of historical practices. Several drycleaning owners and employees attended workshops sponsored by IEPA in 2012 on implementation of the law.

The two-year period covered in this report also saw some major steps forward in addressing pollution of the Chicago Area Waterway System and allowing expanded recreational uses in the future, such as swimming, tubing and jet-skiing in some areas. An agreement and Illinois Pollution Control Board regulations and a federal consent decree involving the Metropolitan Waste and Reclamation District (MWRD) of Greater Chicago, Illinois EPA and U.S.EPA will lead to disinfection at additional MWRD wastewater treatment plants that discharge into the waterways, including the Chicago River. In April 2012, Governor Quinn announced an initial $15 million state grant from IEPA was being made to the MWRD to help pay for the planning and design work for the disinfection.

Illinois EPA works closely with community public water supplies to ensure they can provide a safe and adequate supply of clean water to their customers. In 2012, the Agency provided temporary air stripper equipment to remove potentially hazardous contamination from the water supply of Sauk Village in Cook County, as well extensive educational outreach to the community and arranging temporary bottled water supplies. A number of other communities in central and southern Illinois worked with Illinois EPA to ensure water was delivered despite major drought conditions in the summer of 2012.

During both 2011 and 2012, Illinois EPA expanded its inspection and permitting programs for Concentrated Animal Feeding Operations (CAFO) as part of an agreement with U.S. EPA. The Agency also obtained support from the agricultural community for new fees for CAFO permits to prevent water pollution. The Agency also held numerous meetings with agricultural producers, wastewater dischargers, environmental groups and others in an ongoing initiative to identify strategies to reduce nutrient losses to Illinois' rivers, lakes and streams.

During 2011, the Agency conducted a comprehensive review of the impact of coal ash ponds at several power plants in the state on ground-

water and in 2012, the Agency initiated enforcement actions against them for causing violation of groundwater standards.

Cleaning Up and Preventing Land Contamination

In 2011, the Agency launched the Prevention of Illegal Dumping initiative in response to the continued problem of open dumping across the state that has caused contamination of the environment and health and fire hazards. The initiative provided pamphlets, web information and other educational materials for citizens and Illinois EPA also met with local law enforcement agencies and associations and local officials across the state to focus attention on preventing and prosecuting illegal dumping.

Illinois EPA also submitted and obtained approval from the Illinois Pollution Control Board in 2011-2012 for new regulations on Clean Construction and Demolition Debris to further protect the environment. Although the Board did not adopt the Agency's recommendation to require groundwater monitoring at CCDD disposal facilities, such as former quarries, the Board is hearing additional testimony on the issue.

In 2012, the Agency also resumed holding its popular one-day household hazardous waste collection events around the state in collaboration with local governments and organizations, after having to suspend the program for three years due to budget constraints.

Illinois EPA also partnered with other state and local agencies in the "Mud to Gardens" program in which four communities were provided transported river soil to develop community gardens serving low-income areas in "food desserts" with limited access to healthy fresh produce.

Clean Air

As part of the permit streamlining undertaken by Illinois EPA in 2011, the Registration of Smaller Sources (ROSS) program was established for the smallest air pollution sources. An estimated 3,200 of Illinois 6,500 air emission sources will be eligible for a much less burdensome annual registration, allowing IEPA staff resources to be redirected toward the larger emission sources. This is expected to have no impact on air quality, however, since those 3,200 sources eligible for ROSS account for less than 1 percent of the total emissions.

In the Chicago Metro area, IEPA and Partners for Clean Air, the coalition of businesses and organizations that promotes voluntary activities to reduce air pollution and provides warnings to the public of potentially hazardous ozone or fine particulates levels, expanded their efforts from the summer period to year-round, with equal emphasis on particulates ("soot") as on ozone.

Illinois EPA is also making preparations to meet expected new requirements from U.S. EPA for expanded and revised air monitoring network requirements to meet new federal standards for outdoor pollutants.

Outreach, Community Relations and Education

This report also contains highlights for 2011-2012 on the many activities of the Agency's Offices of Community Relations and Outreach, including informational meetings, public hearings, and distribution of fact sheets to citizens. In addition, the Agency's outreach to agriculture and rural communities and to assist companies in expanding pollution prevention are highlighted. Illinois EPA also continued to sponsor numerous environmental education programs reaching several thousand young people each year and they are also detailed in the report.

The popular Pollution Prevention Intern and Governor's Environmental Corps summer internship programs for college students also continued in 2011-2012.

Environmental Justice

Illinois EPA supported legislation in 2011 to create the Governor's Commission Environmental Justice to make recommendations on environmental justice policies and legislation in Illinois. The Agency has also expanded its commitment to increase its outreach to EJ communities and seek community involvement in environmental decisions impacting them as well as incorporating EJ principles into the Agency's processes.

Emergency Response

One of the more visible activities of Illinois EPA is deployment of our Emergency Response staff, often joined by our regional field office staff, to the scenes of air, water and land contamination releases from facilities and trains and trucks, etc; that must be contained and cleaned up. IEPA staff provides advice and oversight to first responders, usually with follow-up enforcement and compliance referrals by IEPA attorneys. Some examples, including dramatic photos, during 2011-2012 are in this report.

Enforcement and New Laws

Statistics and a summary of significant enforcement cases in 2011-2012 are also included in this report as well as a summary of environmental legislation passed in the period.

More details on all of the topics I have touched on in this introduction may be found in the report. I hope you will find it a valuable resource. We also always welcome ideas and suggestions on how we can make our programs or processes better, including what types of information you would like to see included in future Biennial Reports. When it comes to protecting the environment, it is not just the responsibility of government regulatory agencies, but, as our state Constitution also states, “the duty of each person is to provide and maintain a healthful environment for the benefit or this and future generations.”

-Lisa Bonnett, Director, Illinois EPA

PUBLIC OUTREACH AND CITIZEN INVOLVEMENT

During 2011-2012, the Office of Community Relations (OCR) continued to provide and promote opportunities for meaningful public participation, including holding public meetings, availability sessions and hearings as needed, for permitted facilities and other sites in the remediation and emergency response programs. In addition, numerous Right-to-Know notices and fact sheets were completed as OCR expanded notification in communities about potential vapor intrusion threats ahead of proposed Illinois Pollution Control Board rules for this exposure pathway. During this time OCR also took an active role in communications activities as part of emergency response operations and began a project to overhaul and improve the IEPA website with an emphasis on meeting the changing needs and expectations of citizens, environmental groups and the regulated community.

Public Hearings

During 2011-2012, OCR held fifteen public hearings for the Bureau of Water and ten hearings for the Bureau of Air. Of these 25 hearings, more than 20 dealt with either the mining of coal or the burning of coal to produce power. The NPDES permit and 401 Water Quality Certification hearings for one of these sites -- a proposed coal mine near Canton -- were conducted back-to-back on December 6, 2011. Over 15,000 pages of comments were generated in each of the hearing records during the public hearing comment period, which ran from 45 days before the hearing through January 13, 2012.

Right-to-Know Activities

Applying provisions of the 2006 and 2009 Right-to-Know laws and amendments, OCR has made significant progress in notifying communities of off-site contamination and potential risks to public health. In addition to notifying over 30 Illinois communities through notice letters and fact sheets about potential soil and/or groundwater contamination, OCR stepped up efforts to notify the public about the threat for vapor intrusion based on the proposed (now adopted) Illinois Pollution Control Board vapor intrusion standards.

Community Relations & Emergency Response

During 2011, OCR took steps to more fully integrate communications and outreach capabilities with the Agency's emergency response operations. OCR participated in a planned nuclear plant disaster response exercise conducted by the Federal Emergency Management Agency in conjunction with Illinois Emergency Management Agency, Illinois Air National Guard, Illinois State Police, Illinois Department of Transportation, Illinois Department of Natural Resources, and local responders. The drill trained OCR on how to be a part of the United Area Command (UAC) and provide constant communications among the participating agencies, including those in the field, as information is received by the UAC.

OCR also participated in operations-focused emergency preparedness exercises conducted by Marathon Petroleum Company in an earthquake scenario with breaks in oil pipelines. This was a U.S. EPA-funded event. In this exercise, OCR received hands-on about including necessary steps that the pipeline company must take to respond to these types of releases, including containing and repairing the pipeline breaks in the field.

High-Profile Contamination Sites

OCR provided a number of vital outreach services to communities impacted by high-profile contamination sites. OCR works with USEPA and the Illinois Department of Public Health in disseminating information about the status of site investigations and the potential risks from exposure to contamination. OCR conducted public availability sessions for impacted communities, such as for the Sauk Village Community Water Supply vinyl chloride contamination issue. Applying provisions of the 2006 and 2009 Right-to-Know laws and amendments, OCR informed the Sauk Village public water supply users about contamination affecting the Village's wells and how treatment systems would be used to eliminate the contamination from the drinking water system. The source investigation is ongoing.

In the fall of 2011, OCR coordinated community outreach efforts with the Agency's Emergency Response Unit and Bureau of Water when a train derailment resulted in several road cars containing denatured ethanol and corn mash catching on fire and residual materials seeping into the soil. OCR assisted the Village of Tiskilwa, local officials, and the Bureau County Health Department by overseeing communications about environmental threats and answering citizen's and media questions.

Another high-profile site for which OCR coordinated and developed information between Illinois EPA and the Illinois Department of Public Health for the affected community was the McHenry Groundwater Contamination Site, where chlorinated solvent contamination from a former dry cleaner affected down-gradient private well users on the east end of McHenry. Several other sites required extensive community relations activities: including reviving the Citizen's Advisory Group (CAG) for the New Jersey Zinc Superfund Site in Depue; holding availability sessions and developing technical fact sheets about vapor intrusion sampling and gas extraction work in the Shell/Roxana Area of Concern; responding to concerns about potential groundwater contamination in the Land & Lakes Wheeling Landfill closure certification; and managing continuous communications with a citizen's group and elected officials about potential contamination of the Mahomet Aquifer from Clinton Landfill 3.

Additional Program Outreach

Community Relations staff, in addition to meeting the Right-to-Know requirements, provided ongoing outreach for projects in bureau of Air, Land and Water programs. This assistance included drafting response e-mails and letters, creating informational fact sheets, public notices and news advisories or reviewing similar communications done by responsible parties or their consultants, setting up and participating in meetings with the public, organized groups, elected officials at all levels and the media. This included planning and participating in over twenty public availability sessions (open house style format) to mark important milestones in the investigation, remediation, and completion phases of Bureau of Land projects. During the reporting period, assistance was provided for numerous manufactured gas plant (MGPs) sites, including 21 Ameren MGPs, ten ComEd MGPs, ten Nicor MGPs, one Integrys (Peoples Gas) MGP, and two non-utility MGPs. OCR staff also conducted ten meetings and availability sessions, in addition to writing fact sheets, for Bureau of Air sites. As noted previously, over a dozen public hearings were held related to Bureau of Water projects; many more availability sessions and small group meetings were arranged to create opportunities for dialogue between the public and Illinois EPA on sensitive topics like mining of fracking sand and livestock waste management operations. OCR performed numerous door-to-door activities relative to acquiring access for residential sampling and gave updates and presentations to local officials on several sites.

Ongoing Project: Website Overhaul

OCR worked with the Illinois EPA Communications Manager and the Information Technology section to direct a Central Management Services (CMS) lead changeover, reorganization and redesign of the Illinois EPA website. The initial work conducted by OCR to develop the new website structure for a topics-driven user interface provides the foundation for the ultimate move of Agency web pages to a new more streamlined look and easier usability.

Mud to Gardens Initiative:

The IEPA's "Mud to Community Gardens" project is a partnership with the IDOT, the IDNR, and local community groups to create gardens that function as an educational resource, a nutritious food source, and an all-around source of pride for some of our state's most underprivileged citizens and neighborhoods. The agency's Chicago gardens utilize soil dredged by the IDNR at Lake County's Chain O'Lakes, while the garden in East St. Louis obtained its soil through the IDNR's dredging efforts at Pere Marquette Lake. The soil was then tested for contaminants by the IEPA, and transported to the site by the IDOT. Partnering with local schools, health districts, and park districts, the "Mud to Community Gardens" project demonstrates the potential for state agencies to work together to make a

positive impact on residents of our state's most at-risk communities.

Clinton County Methane Digester Initiative

The IEPA has helped bring dairy producers and other stakeholders together to try to develop a community anaerobic, manure-methane digester in Clinton County. A Request for Proposal (RFP) was submitted by Heartlands Conservancy, while NEATech conducted a feasibility study to gauge the financial viability of the project. Anaerobic digestion technology represents an innovative best management practice (BMP) that has great potential to reduce the environmental footprint of livestock producers on water resources throughout the state. Clinton County's high density of dairy producers makes the prospect of a community anaerobic digester more economically attractive at the same time that this concentration of operations contributes greatly to water quality issues in the area.

National Conservation in Action Tour: Community 4 Conservation

The IEPA participates in an advisory capacity in eight different watershed groups across the state, providing advice on best management practice (BMP) implementation and strategies for obtaining grant funding. One watershed effort which has stood out on account of local producer involvement and dedication was Livingston County's Indian Creek Watershed. The conservation work being done around Indian Creek was spotlighted this July on the Conservation Technology Information Center's (CTIC) Conservation in Action: Community for Conservation tour. Demonstrations were conducted for aerial cover crop planting, rotational grazing, agronomic manure application, and tile drainage among others. Efforts in Indian Creek vividly demonstrate the potential for implementing practices that achieve water and soil quality goals while not sacrificing profitability. The Illinois Environmental Protection Agency produced and filmed the introductory video for the tour featuring introductions from the Illinois' Departments of Environmental Protection, Natural Resources, Agriculture and federal departments of the Natural Resource & Conservation and Resource Development. Also included were introductory segments representing each of the conservation participants participating in the tour.

Environmental Justice

The Illinois EPA is committed to protecting the health of the citizens of Illinois and its environment, and to promoting environmental equity in the administration of its programs. The Agency supports the objectives of achieving environmental equity for all of the citizens of Illinois. The Agency's Environmental Justice (EJ) Policy provides specific parameters for the Illinois EPA's bureaus, divisions and offices to implement the policy to reduce environmental inequities, and to prevent and reduce pollution overall.

The Agency defines EJ as based on the principle that all people should be protected from environmental pollution and have the right to a clean and healthy environment. Environmental justice is the protection of the health of the people of Illinois and its environment, equity in the administration of the State's environmental programs, and the provision of adequate opportunities for meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Some approaches/strategies to address and coordinate EJ activities are: community meetings, small group meetings, informational hearings, bi- and multi-lingual efforts, exploring new avenues for public participation, EJ complaints, permitting actions and internal training. The EJ Policy is printed in English and Spanish and posted on the agency's website.

The Agency hosts a meeting of the Environmental Justice Advisory Group on a quarterly basis. The EJ Advisory Group provides input to the Agency Director on EJ issues. The EJ Advisory Group comprises grass roots environmental justice groups, environmental groups, industry, academia and the United States Environmental Protection Agency.

The Agency will provide administrative support and staff for the Governor's Commission on Environmental Justice. The Commission convened its first meeting on Wednesday, August 14, 2013. The Commission will; 1) advise state entities on environmental justice and related community issues 2) review and analyze the impact of current state laws and policies on the issue of environmental justice and sustainable communities 3) assess the adequacy of state and local laws to address the issue of environmental justice and sustainable communities 4) develop criteria to assess whether communities in the state may be experiencing environmental justice issues and 5) recommend options to the Governor for addressing issues, concerns, or problems related to environmental justice that surface after reviewing state laws and policies, including prioritizing areas of the state that need immediate attention.

The Agency recently settled a Title VI complaint with the U.S. Environmental Protection Agency's Office of Civil Rights on the Geneva Energy facility in Ford Heights. Specific commitments of the settlement are: 1) expand scope of the public participation policy to give appropriate level of outreach in potential EJ communities 2) provide notice to the public for proposed construction or operating permits that are non-administrative and issued a violation notice for high priority violations 3) post information on the Agency website concerning grievances received 4) redesign the online permit tracking system to further facilitate implementation of the public participation policy and submission of status reports.

On September 30, 2012 the Agency completed a three year EJ grant that focused on Lead Information Outreach in the City of East St. Louis.

Pollution Prevention

Summer Internship Program

Every year, Illinois EPA places college-level engineering and chemistry students in the field to work on process and equipment improvements that will help industrial, institutional and local government facilities save money and reduce their environmental impact. The pollution prevention internship program provides the students with practical work experience, while helping facilities identify cost-effective opportunities to cut waste, save energy and conserve resources.

In 2011 and 2012, intern students were placed at 29 facilities, including Caterpillar, Nalco Company, Case New Holland, Woodward MPC, Cooper B-Line, Rock Island Arsenal, Southwestern Container, Shawnee Correctional Center, Village of Algonquin and University of Illinois at Chicago. The interns made over 100 recommendations for environmental improvements that, if implemented, have the potential to:

- Reduce energy costs by $2.2 million;
- Divert over 900 tons of waste material from landfilling;
- Curb greenhouse gas emissions by over 23 metric tons;
- ave over $1 million in operating and disposal costs.

Mercury Product Stewardship

Over the last 10 years, Illinois EPA has advanced several legislative initiatives to phase down non-essential uses of mercury in household and commercial products, while working with product manufacturers, recyclers and environmental groups to create statewide collection systems for properly managing mercury-containing products at the end of their use. This product stewardship effort is designed to reduce mercury releases to the environment. If thrown in the trash, products containing mercury may be crushed or broken during collection or disposal activities, causing the mercury to be released to the air.

Illinois EPA is working with the auto industry-sponsored End of Life Vehicle Solutions (ELVS) Corporation and vehicle recyclers to implement the Illinois Mercury Switch Removal Act. Enacted in 2006, this law requires the vehicle manufacturers to establish a program to collect and properly dispose of mercury-containing switches from end-of-life

vehicles in the state. The purpose of the program is to reduce mercury releases to the environment when scrap vehicles are shredded and smelted to make new steel.

The mercury vehicle switches may be found in the convenience lighting and anti-lock brake systems of pre-2003 models. The automakers, primarily through ELVS, are providing program guidelines, collection supplies, free shipping and a $2 a switch monetary incentive to vehicle recyclers recovering mercury switches. In 2011 and 2012, Illinois EPA sent informational materials to over 450 auto recyclers and visited 30 facilities to check for compliance.

In 2011, 140 vehicle recyclers in the state collected over 47,000 mercury vehicle switches or a total of 104 pounds of mercury for proper management. Over 150 vehicle recyclers collected 42,385 mercury switches or 93 pounds of mercury in 2012. This represents a statewide collection rate of approximately 27 percent.

Many wall-mounted thermostats sold prior to 2006 contain a mercury switch, which consists of a glass bulb with mercury inside. The switches are used to activate heating, ventilation and cooling (HVAC) systems in buildings. Illinois EPA is working with the industry-sponsored Thermostat Recycling Corporation (TRC) to implement the Illinois Mercury Thermostat Collection Act, which went into effect in 2011. This law requires thermostat manufacturers that historically distributed mercury-containing thermostats in the U.S. to establish a program to collect and properly dispose of mercury-containing thermostats that are taken out of service in the state.

Under the law, collection takes place through HVAC wholesale outlets that sell thermostats. HVAC contractors or service technicians are required to return mercury-containing thermostats to a collection location for recycling when they are removed from service. It is illegal to dispose of the thermostats in the trash or garbage in Illinois. TRC provides collection bins, signage and promotional materials to HVAC wholesalers and contractors, in addition to paying all costs for shipping and processing the thermostats collected through the program.

In 2011 and 2012, Illinois EPA sent fact sheets to over 1,000 HVAC firms to inform them of their responsibilities for keeping mercury-containing thermostats out of the solid waste stream. The Agency also visited over 80 HVAC equipment wholesalers to check for compliance with the law.

In 2011, TRC recovered 7, 229 mercury-containing thermostats from collection locations in Illinois, which exceeded the statewide collection target by over 2,000 thermostats. In 2012, the program recovered 13,061 mercury-containing thermostats. The collection target for that year was 15,000 thermostats. The program also recovered 771 and 2,452 loose mercury bulbs from thermostats in 2011 and 2012, respectively.

New Illinois Environmental Laws Enacted in 2011-2012

Mercury & Other Chemical Reduction Legislation

P.A. 97-0459/SB 1213. Signed into law on August 19, 2011; effective July 1, 2012. Amends the Mercury-Added Product Prohibition Act. Adds mercury-containing pressure transducers, rings, seals and sensors to the list of mercury-added products that no person shall sell, offer to sell, or distribute in Illinois.

P.A. 97-1107/HB 1261. Signed into law on August 27, 2012; effective July 1, 2013. Amends the Mercury-added Product Prohibition Act. Sets forth a definition for "zinc air button cell battery". Includes zinc air button cell batteries in the list of mercury-added products regarding which no person shall sell, offer to sell, or distribute in this State.

Environmental Education

In 2011 and 2012, nearly 2,000 fourth graders from Sangamon County were introduced to the importance of their environment and learned about ways to help protect and improve the world around them by attending Earth Stewardship Day. This event, spearheaded by the Illinois EPA, is a collaboration of several agencies and organizations to celebrate Earth Day and promote environmental awareness. Around 35 interactive presentations and special attractions were scattered throughout the fairgrounds each year representing a wide

range of agencies and organizations, many of which were staffed by the Illinois EPA. Some of the featured presenters included Lanphier High School's Environmental Club, Grant Middle School's Illinois Math and Science Academy students, Auburn High School's Science Club, and Lincoln Magnet School's Sixth Grade Global Water Crisis project. The event was held at the Illinois State Fairgrounds and is intended to teach the students about the importance of protecting, restoring, recycling and reusing natural resources.

The Agency's quarterly newsletter, The Citizens' Bulletin, was e-mailed electronically in 2011 and 2012 for the winter, spring, summer and fall editions to registered subscribers and posted on the web site to provide citizens with useful information about environmental issues.

In 2011 and 2012, more than 150 fifth and sixth grade students from across Illinois were recognized at the annual Poster, Poetry and Prose Awards Ceremony and Reception. The theme rotates every year between air, land and water. The theme for 2011 was Breathing Easier – What Can We Do? It's Up to Me and You! and for 2012, Going Green to Keep Your Storm Water Clean! Student winners, along with their families and teachers were invited to the awards ceremony and reception at the Hall of Flags and Auditorium in the Howlett Building in Springfield. In addition, tours of the Illinois State Capitol and the Illinois State Museum were offered. A certificate and ribbon

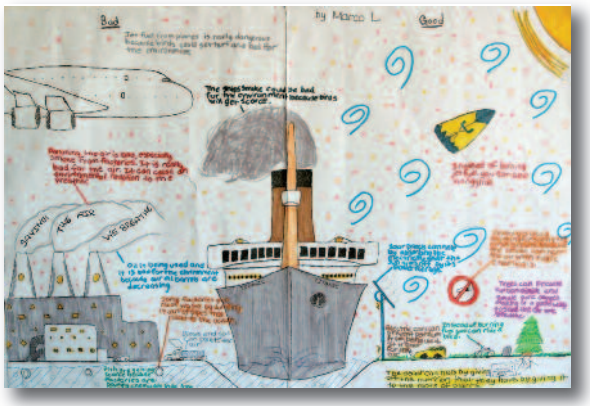
Lanphier High School's Environmental Club teaches the fourth graders about the importance of recycling with the Recycle Dash.

were presented to all of the finalists, and the top winners received a padfolio, rosette, certificate, and an environmental reference book for their school library. An additional award was presented to twelve students; an Honorable Mention medal, in recognition of creativity, time and effort, and artistic skills, as well as a certificate and an environmental reference book. A calendar was also created to include the works of the top 12 and honorable mention winners.

The contest is intended to introduce students to a greater understanding of the importance of environmental awareness with the assistance of the Agency's teacher's manual, Environmental Pathways – Youth Investigating Pollution Issues in Illinois. This free environmental education teacher's guide meets the criteria of the North American Association for Environmental Education's Guidelines for Learning and is correlated with the Illinois Learning Standards. Although it is geared towards fifth and sixth grade, it is adaptable to use for other age groups. The guide is available by downloading or requesting a hard copy online at: http://www.epa.state.il.us/kids/teachers/environmental-pathways/index.html.

The Agency served as a Special Awards Sponsor at the Illinois Junior Academy of Science State Exposition in Champaign and awarded four Environmental Excellence awards to students whose project encompassed an environmental awareness. Over 1,000 Illinois students entered a project in the science fair. Criteria for the Environmental Excellence Award include issues such as addressing the prevention of pollution, the remediation of air, land or water, or analyzing the effect of pollution on our environment. The awards given were broken into two categories; a junior (7th and 8th grade) and a senior (9th – 12th grade) division. Each winner received a padfolio, a plaque and a certificate.

The Agency sponsored and celebrated its fifth annual Dive In! event on November 4, 2011. It was co-sponsored by the Environmental Education Association of Illinois and was held at the Touch of Nature in Makanda for more than 400 fourth and fifth grade students from 17 southern Illinois classrooms. Dive In! is designed to teach students the importance of protecting and conserving water, one of our



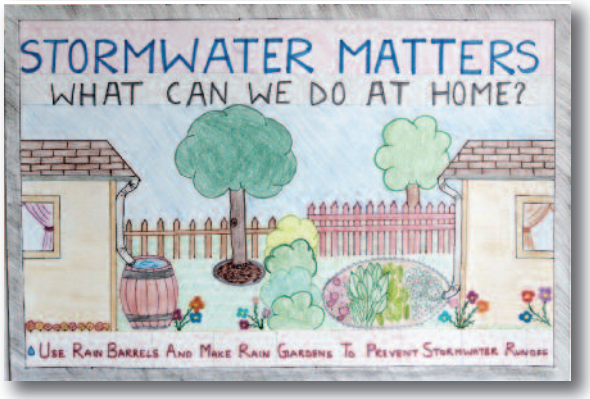
2011 Top 12 Winner: Marco Lambo
from Washington School in Glenview

most precious natural resources. This educational event consisted of hands-on learning stations that covered a wide variety of topics including the water cycle, geology, wetlands, streams, aquatic wildlife, watersheds, water quality, conservation, and soils. The 2012 Dive In! was held on October 10 at the Peace of Earth Environmental Learning Center near Rushville, Illinois. This traveling, water-related stewardship event included presentations regarding water quality, stream tables, geology of Illinois, macroinvertebrates, animals in the watershed. The event reached out to more than 250 students in the surrounding area.

In 2011 and 2012, the Agency was actively involved with the Environmental Education Association of Illinois (EEAI). EEAI is a statewide organization that works to create and maintain a vital network to support and advance quality environmental education throughout the state. The Agency participates in presenting and sharing information at the annual conference where over 100 formal and non-formal environmental educators from around the state attend. In addition, the Agency exhibited and presented at the Illinois Science Teachers Association's both years to 1,200 science teachers and virtually all the Illinois science and technical education leadership, as well as at the Clean Water Celebration in Peoria where equipment used to monitor water quality in Illinois' lakes and rivers was demonstrated to over 5,000 students ranging from 3rd grade to high school.

Agency staff also made presentations at the Chemical Industry Council of Illinois (CICI) Career Conference in 2011 and 2012 at the Museum of Science and Industry in Chicago. The conference is an Industry Educational Partnership Program designed to provide students with information on careers and educational opportunities while building their awareness of the impact chemistry has on their lives. More than 3,000 area middle and high school students who are interested in the sciences attended this event and rotated through the Industry Booths, Career Challenge and 'Weird Science'. The Agency demonstrated various hands-on activities for the students such as the following: Weighing candy – students had to try and calculate the weight of the 1 oz. cup of candy using a digital balance; Wimshurst Electrostatic Generator – demonstrated one of the first pieces of equipment that was used to control and experiment with electricity; and presented aquatic macroinvertebrates that can be used as biological indicators, wastewater sampling bottles that are used in the field, and a model of a wastewater treatment process. There was also a solar powered fan on display.

In 2011 and 2012, presentations were given at the Conservation Fair held at the DuQuoin State Fairgrounds. The Conservation Fair was hosted by Jackson, Williamson, Perry, Washington, Randolph and Franklin Counties and provided hands-on education about the environment and its valuable resources to surrounding area students in kindergarten through 6th grade. One of the Agency's hands-on presentations was on water quality and monitoring through the use of chemical and biological analyses. Other events include the Macoupin County Earth Stewardship Week hosted by Macoupin County Soil Water Conservation District, Montgomery County Earth



2012 Top 12 Winner: Alycia Bhargava from
Nancy Young Elementary School in Aurora

Stewardship Day hosted by Montgomery/ Christian Cooperative Extension, McLean County Earth Stewardship Day hosted by McLean County Cooperative Extension and Tazewell County Earth Stewardship Day hosted by Tazewell County. In addition, Agency staff presented at the annual Stewardship Week in 2011 that was held at the Western Illinois Youth Camp at Lake Jacksonville. Stewardship Week is hosted by the University of Illinois Extension and invites students in grades 1 through 6 from the surrounding nine counties to attend this environmental education event to teach students how they can help protect the environment.

Other presentations during 2011 and 2012 included Dubois Elementary School in Springfield's fourth grade classes and Fairview Elementary School in Springfield third, fourth and fifth grades that rotated through the following stations: Groundwater Flow Model, Recycle Dash, Toxic Relay, Macroinvertebrates and Monitoring Water Quality. Also, at Laketown Elementary School in Springfield's Science Night, students learned about a variety of environmental information by playing the Agency's plinko game. Agency staff presented limnology to 6th graders from Grant Middle School at Camp Cilca in Cantrall in May 2011 and 2012. The students were introduced to the lake's ecosystem and how the health of the lake can be determined by studying the life within the lake including macroinvertebrates. After demonstrating the stream table to the students and how the watershed's makeup can affect the waterbody, the students were then able to explore the lake themselves with hands-on tools such as nets and scopes. In addition, Agency staff facilitated a Project Learning Tree workshop to several early childcare teachers and providers in 2011 and 2012. Project Learning Tree (PLT) is an award winning, multi-disciplinary environmental education program for educators and students in Pre-K-grade 12. It is one of the most widely used environmental education programs in the United States and abroad, and continues to set the standard for environmental education excellence. PLT meets state and national education standards. The curriculum materials provide the tools educators need to bring the environment into the classroom and their students into the environment. Topics range from forests, wildlife, and water, to community planning, waste management and energy.

Elizabeth Ringhausen from St. Francis/ Holy Ghost School in Jerseyville Project Title: Erosion: Earth vs. Water

The Illinois EPA hosted a career day for Lanphier High School's Environmental Club on January 25, 2011 to learn about the mission, organization and history of the Agency and common job titles including the salary range and educational requirements. Lanphier is located directly across the street from the Illinois EPA Headquarters in Springfield. This all day event was very well received as the students were completely engaged and interested in all topic areas. After a brief overview of the Agency, the students heard about the Office of Pollution Prevention's intern program, energy audits, different types of renewable energy and why renewable energy is important, reducing plastic bags initiative, and thermal imagining equipment, which was demonstrated. The students then heard about the Vehicle Emissions Test Program and were able to see how the car testers actually worked. Following a presentation about Environmental Justice, the students learned about the Office of Site Evaluation and the variation of sites as well as all the preparation it takes to learn about what the investigators are going to be challenged with at each potential contaminated site. Some of the equipment used in the field was also demonstrated. Next, the students learned about the Bureau of Water and ways that Illinois water is monitored through biological, physical and chemical processes. Students were interactive in using some of the equipment. The Emergency Response Unit provided the shock factor for

Students learn about streams and macroinvertebrates at the 2012 Dive In! event.

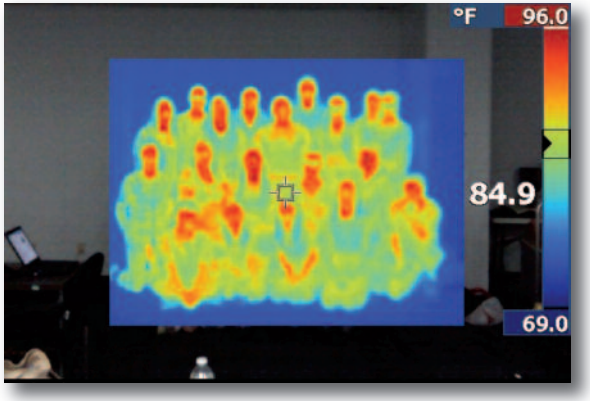
the students by describing some of the sites they have been to that include major explosions, fires, train derailments, chemical leaks, semi crashes and more. The students also got a chance to suit up like they were going out into the field. Finally, the students ended their day with the Recycle Dash, which is one of the Jr. Governors Environmental Corps (summer internship) activities.

In 2011, the Agency signed off on the final version of the Environmental Literacy for Illinois 2010 Strategic Plan. After the 2009 Conservation Congress recommendations to increase youth involvement and interest in outdoor activities, the Illinois Department of Natural Resources engaged the Illinois State Board of Education and the Illinois Environmental Protection Agency to update this plan, with input from over 30 organizations. The state agencies also posted drafts of the plan for public comment at two comment sessions and received over 200 comments on its goals, objectives and strategies. Governor Pat Quinn signed Executive Order 10-7 on April 14, 2010, supporting the adoption of the Environmental Literacy for Illinois strategic plan.

In addition to promoting environmental education integration into classroom learning standards, this plan also evaluates, integrates and promotes non-formal education initiatives as a necessary supplement to environmental education in Illinois. This includes activities that focus on providing opportunities to families, such as nature education and outdoor play opportunities, and activities that focus on promoting sustainable practices of communities such as sustainable school siting, increasing alternative and active transportation options and promoting sustainable food choice practices. These efforts, coupled with classroom education, will create the culture necessary to foster a new generation of environmentally conscience citizens.

Partners include:
State of Illinois: Office of Governor Pat Quinn, Department of Agriculture, Department of Commerce and Economic Opportunity, Department of Natural Resources, Environmental Protection Agency, and State Board of Education; Federal: U.S. Army Corps of Engineers River Project Office, and U.S. Army Corps of Engineers Lake Shelbyville and Carlyle Lake; Non-Government Organizations: Active Transportation Alliance, Association of Illinois Soil and Water Conservation Districts, Chicago Metropolitan Association for the Education of Young Children, Chicago Wilderness, Environmental Education Association of Illinois, Fuller Park Community Development/Eden Place Nature Center, Illinois Science Teachers Association, Lincoln Park Zoo, Nature's Classroom, Northern Illinois University, One Star/Chicago Astronomical Society, and Salt Creek Greenway Association.

Agency staff participated in the statewide Radon Poster Contest held at the American Lung Association of Illinois Springfield office. Out of the 300 posters received, three of the posters were chosen to compete against posters from across the country in the National Radon Poster Contest sponsored by the National Safety Council in partnership with the U.S. Environmental Protection Agency. The poster contest is designed to raise aware-



A picture of the students taken with a thermal imaging camera.

ness about the harmful effects of elevated levels of indoor radon gas and to increase the number of homes tested for radon. The statewide sponsors include the Illinois Emergency Management Agency, the American Lung Association, the University of Illinois Extension Office and the Respiratory Health Association of Metropolitan Chicago. The three finalists in Illinois were selected from 14 top entries from five regions. Each of these regional winners received a $50 savings bond.

The Illinois EPA also staffed a hands-on environmental education activity booth in both 2011 and 2012 in Conservation World at the Illinois State Fair, with an emphasis on interactive games for kids.

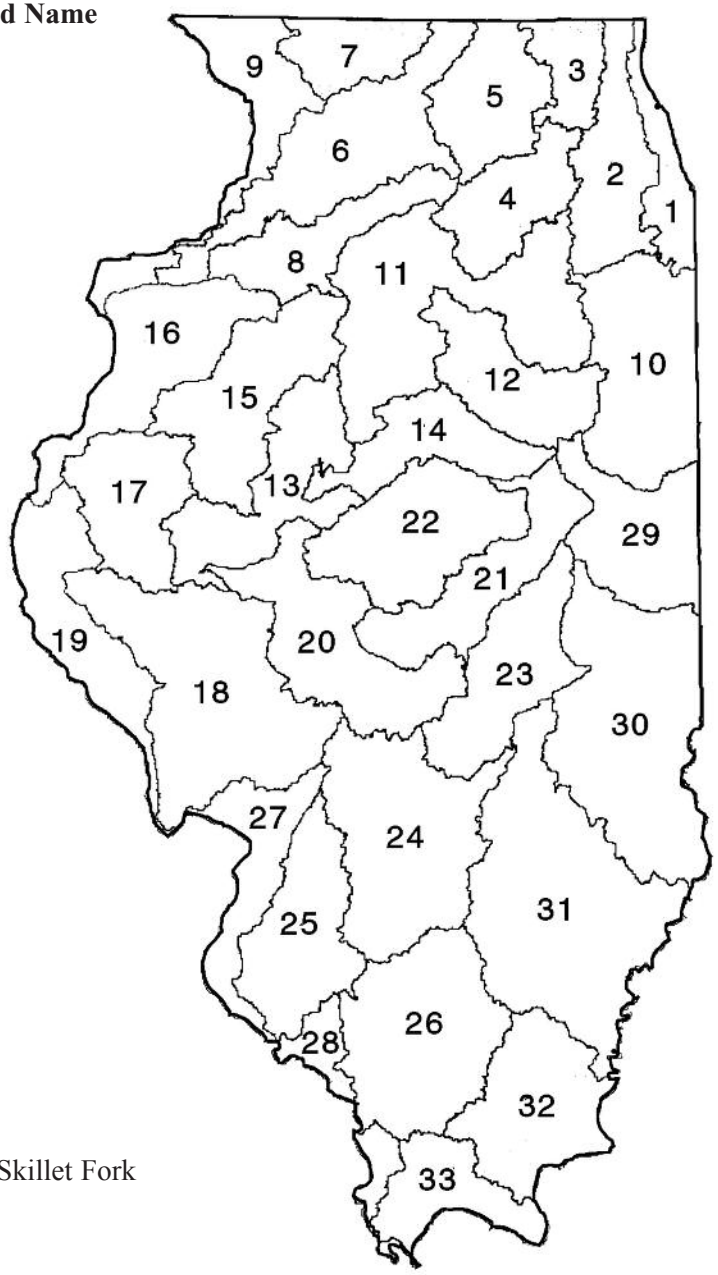
"...By thy rivers gently flowing, Illinois, Illinois."

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 119,244 stream miles of rivers and streams, 91,456 inland lakes and ponds within its borders, and 911 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. According to the Agency's 2012 Integrated Report, approximately 75 percent of the lakes and reservoirs and 83 percent of the stream miles used for drinking water supplies that were tested showed some impairment. 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.

MONITORING SURFACE WATER CONDITION AND THREATS

The quality of rivers, lakes, and Lake Michigan plays a fundamental and vital role in the overall health of the environment and has a direct bearing on economic, social, recreational, and many other opportunities available to the residents of Illinois.

Monitoring Illinois Waters

To track resource quality condition and evaluate the effectiveness of water pollution control programs, Illinois EPA's Surface Water Section has been monitoring Illinois surface waters since 1972. Over this 40-year period, Illinois EPA has refined it's monitoring efforts to keep pace with technological advances, broadening environmental concerns, and increasing opportunities to benefit from collaboration with other agencies and public partners.

Monitoring programs are designed differently, depending on goals/objectives, water resource type (streams, lakes, Lake Michigan), and resources available (personnel and financial). Major monitoring programs conducted by the Surface Water Section include:

Ambient Water Quality Monitoring Network – 146 fixed stream stations distributed statewide and monitored nine times annually.

Intensive Basin Surveys – river basin-scale stream monitoring done on a five-year cycle (approximately 140 stations annually) with the Illinois Department of Natural Resources.

Facility-Related Stream Surveys – monitoring conducted above and below wastewater treatment plants to determine impacts, if any, on downstream waters.

Ambient Lake Monitoring Program – 40-50 significant publicly-owned lakes monitored annually five times per year, once every five years.

Illinois Clean Lakes Program – intensive lake monitoring projects that diagnose lake impairments and lead to recommended feasible lake protection/restoration plans.

Volunteer Lake Monitoring Program – a monitoring and education program for Illinois citizens to learn about lake ecosystems.

Lake Michigan Monitoring Program – a newly redesigned program in 2010 consisting of near shore, harbors, and public water supply intake monitoring.

Fish Contaminant Monitoring Program – monitoring and analysis of fish fillets to determine levels of contaminants and issue consumption advisories, if necessary.

A report entitled, "Illinois Water Monitoring Strategy, 2007-2012," found at http://www.epa.state.il.us/water/water-quality/monitoring-strategy/2007-2012/index.html, provides a detailed discussion of all Agency monitoring programs.

Reporting

Pursuant to Sections 305(b) and 303(d) of the Clean Water Act, Illinois EPA is responsible for reviewing its collected data to assess the attainment or non-attainment of designated uses, such as aquatic life, swimming, fish consumption, and public water supply. Those assessments are reported to state and federal governments on a biennial basis in a document entitled, "Illinois Integrated Water Quality Report and Section 303(d) List."

The Good News

The miles of streams and lakes assessed, as well as assessment capabilities and tools, have improved dramatically since passage of the Clean Water Act in 1972. And the good news is that from an aquatic life use standpoint, 62.1 percent of Illinois stream miles are rated in "good" condition in 2012. That is a dramatic improvement from 1972 when only 34.7 percent were rated as "good." It is primarily due to ongoing efforts to control both point source ("end of pipe") and nonpoint source (runoff) pollution. The Upper Illinois River, for example, now supports walleye and other fishing tournaments, and uncontrolled industrial pollution and effluent toxicity have been virtually

eliminated. Of equal good news is that 92.8 percent of lake acres and 100 percent of Lake Michigan open waters were also rated "good" for aquatic life use in 2012.

Continued Threats

However, real threats continue. Mercury continues to be found in fish tissues. 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 2012, tests indicated that 24 lakes and nine streams had mercury levels that warranted additional, specific consumption warnings. These water sources included the Ohio, Rock, Little Wabash, and Wabash Rivers.

Especially after rainfall events, fecal coliform found in excess of its Illinois Pollution Control Board water quality standard, impairs swimming use at many lakes and streams. Rainfall and subsequent runoff causes excess amounts of nutrients (nitrogen and phosphorus) and sediments from agricultural, urban, and other sources to wash into waterways. Excess nutrients can cause excessive algal growth, and when algae eventually die off, they consume the oxygen needed for aquatic life. Sediment washed from rural fields and urban construction sites can clog drainage ditches and fill lakes, losing precious storage space for public water supply needs.

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 2010, 520 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 275 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 r esource 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 2011 and 2012

In 2009 and 2010, Illinois Section 319 programs received a total of $11,718,941 in funding for all categories. They included grant projects that prevented 1,523 tons of sediment, 473 pounds of total suspended solids, 15,386 pounds of phosphorus and 31,820 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/biannual-319.

Permeable paving is one of the Best Management Practices encouraged through the IGIG program

Illinois Green Infrastructure Grant Program (IGIG) for Stormwater Management 2011-2012

Illinois EPA, with the help of a diverse stakeholder steering committee, developed this program in 2010 as one of the Agency's most recent financial assistance programs. An Illinois EPA Nonpoint Source Unit staff member describes the program as "beginning

with a big splash in an effort to leave a green footprint."

The IGIG program is designed to provide financial assistance to local units of government and other organizations to implement green infrastructure best management practices (BMP) to reduce stormwater runoff within areas serviced by either a Combined Sewer Overflow (CSO) or a Municipal Separate Storm Sewer System (MS4). Successful applications will document stormwater management practices that have a primary goal of preserving, restoring, mimicking, or enhancing natural hydrology through percolation, evapotranspiration, filtering, harvesting and even the reuse of precipitation.

In 2011 and 2012, $10 million was made available for installation of BMPs for urban stormwater control and 243 applications totaling almost $135 million were received by the December deadlines.

Illinois EPA accepted proposals for three program categories: (1) Combined Sewer Overflow Rehabilitation (2) Stormwater Retention and Infiltration and (3) Green Infrastructure Small Projects Category.

Project proposals ranged from the installation of green roofs and permeable pavement systems to the disconnection of down spouts and illicit inflow disconnections from combined sewer systems.

The continued positive reception to this program shows not only the local need for assistance to implement appropriate BMPs to control stormwater, but also the diversity and number of local entities interested in controlling stormwater runoff to protect Illinois' water resources.

Students in Bloomington participate in a LEAP field trip.

THE LAKE EDUCATION ASSISTANCE PROGRAM

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 State Fiscal Year 2011, 55 recipients received approximately $27,000 for lake projects and education. In SFY 2012, another 50 recipients received approximately $24,000.

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 2012, the Illinois VLMP celebrated its 32nd anniversary and is one of the Agency's most successful and longstanding 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.

Monitoring is conducted twice per month from May through October, typically at three 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 three 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 Dissolved Oxygen/Temperature profiles, as equipment becomes 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.

SINCE 2011, ALMOST 28,000 ILLINOIS CITIZENS REMOVED LITTER FROM ILLINOIS STREAMBANKS AND LAKE SHORES.

Lake Sara volunteers Charles Kellogg and Bob Kennedy take a Secchi depth reading. They are members of the Lake Sara Erosion Control Committee which received the 2011 Frank Loftus Award for lake stewardship from the Illinois Lake Management Association.

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 340 cleanups were conducted including 692 in 2011-2012. 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.

A total of 35 applications were received for the 2011 SCALE program and 35 were deemed eligible and were approved for funding for a total cost of $42,500.

A total of 35 applications were received for the 2012 SCALE program. All 35 applicants were approved for funding for a total cost of $36,500.

During 2011 and 2012, SCALE participants removed more than 436 tons of trash from almost 1,600 miles of streams and almost 3,500 acres of lakes in Illinois, with 27,000 volunteers participating in the cleanup events.

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.

IEPA inspectors visit numerous facilities throughout the year and work with treatment plant operators, particularly on issues related to sanitary sewer overflows, combined sewer overflows and livestock facilities.

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.

The Illinois EPA is required to monitor compliance and evaluate violations of NPDES permittees to ensure timely and appropriate actions are taken to meet conditions of their permits. Quarterly Non-Compliance Reports are prepared on major facilities throughout the State. Major facilities are defined by USEPA as municipalities that discharge one million gallons per day or more and industries which meet a specific scoring criteria. Compliance rates for Illinois have been consistently around 95 percent, which is much higher than the national average.

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, storm water, operator assistance, and emergency response.

During this reporting period, increased attention has been given to compliance issues related to wet weather and storm water discharges. Pollution can occur from runoff caused by storms, including sewer system overflows. In addition, enhancements to the concentrated animal feeding operations program have bolstered the inspection program. These activities 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 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 2009 and 2010, over 95 percent of the total population receiving drinking water was served water that complied with limits on regulated impurities.

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 byproducts, 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 2012, only 16 CWS serving a total population of 175,944 still exceeded a radionuclide standard. This is a 71 percent improvement. Most of the remaining non-complaint CWS areunder a compliance schedule in which compliance will be achieved in the shortest amount of time (depending on the selected treatment option).

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.

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, Right-to-Know notifications, contaminant susceptibility pathogen assessments under the groundwater rule, 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. Illinois EPA is in the process of developing source water protection planning rules. The Groundwater Advisory Council sponsored one regulatory development input session with stakeholders, and additional outreach is being conducted. 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 noncommunity 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/.

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 requires environmental consultants to use this technology under new amendments proposed to Pollution Control Board regulations.

INFRASTRUCTURE PLANNING AND FINANCIAL ASSISTANCE 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 (SRF), now featuring two low interest revolving loan programs that have together distributed more than $4.4 billion in state, federal and repayment funding to communities around the state. These loans assist local governments with the installation, upgrade 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 later added authorization for the drinking water program (PWSLP) in 1997. Through 2012, a total of 697 CWSRF (wastewater) and 433 PWSLP (drinking water) infrastructure loans have been made.

During 2011 a total of 102 applicants were approved to receive more than $589 million in CWSRF project loans under the program. The drinking water program demonstrated similar success, with almost $152 million awarded for 74 PWSLP projects.

Originally, 80 percent of the funding for the SRF 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.

Governor Pat Quinn announced the first Illinois Clean Water Initiative project loan for improvements to the Pekin wastewater treatment plant on Dec. 4, 2012.

CLEAN WATER INITIATIVE

On Oct. 17, 2012, Governor Pat Quinn announced a new $1 billion Clean Water Initiative that will greatly expand affordable financing for communities across Illinois for such badly-needed projects as sewer and wastewater treatment plant upgrades, drinking water treatment plant improvements and aging water main replacements. This new initiative builds on the success of the State Revolving Fund loan program administered by Illinois EPA since 1989 that has provided more than $4.3 billion in below market-rate loans to 472 Illinois communities for drinking water and wastewater infrastructure, without a single loan default. The Clean Water Initiative greatly expands the number of projects from around $300 million in available funding annually through issuing of bonds by the Illinois Finance Authority that are tied to the repayment of the loans, the buildup of equity from the current loan portfolio, as well as annual federal grant funds from the U.S. Environmental Protection Agency . Besides meeting critical community infrastructure needs, both for replacement and expansion, it will provide a boost to the economy, creating a projected 9,700 direct construction jobs and more than 18,800 related and stimulated jobs. The Clean Water Initiative does not increase general obligation debt for the state or require any additional state funds. Local governments, water and wastewater districts across Illinois are urged to participate in this exciting initiative. More information on the application process can be found at cleanwater.illinois.org.

The Illinois Clean Water Initiative projects are creating thousands of jobs across Illinois.

Wastewater Loans in 2011 and 2012

Recipient	Project Description	Loan Amount	County
Anna	Rehabilitation of pump stations and replacement of sanitary sewer force main	$413,887.00	Union
Athens	New manual bypass bar screen, grit chamber, and two sequence batch reactor basins	$4,930,399.00	Menard
Bartlett	Pump Replacement	$2,167,875.00	Cook
Beardstown SD	Construction of new solids and grit removal facility	$2,826,670.00	Cass
Belleville	WWTP Expansion	$20,000,000.00	St. Clair
Belleville	Remediation of CSO	$3,393,364.00	St. Clair
Belleville	WWTP expansion & remediation of CSO	$7,791,893.00	St. Clair
Belvidere	Improvements to the teritory filtration facilities	$2,885,940.00	Boone
Big Rock	New water reclamation facility	$3,750,000.00	Kane
Bloomingdale	Improvements, replacements, and restorations to pumps, tanks, & screens	$4,783,320.00	DuPage
Bloomington	Furninshing and installing sanitary sewer, storm sewer, and roadway surface restoration	$5,448,062.00	McLean
Brighton	Sewer collection system improvements	$1,163,881.00	Macoupin
Buffalo Grove	Upgrade/rehabilitation of two lift stations	$437,388.00	Lake
Calumet City	New sewer lining	$550,000.00	Cook
Carrollton	Replace and line sanitary sewer	$2,500,000.00	Greene
Caseyville Township	Provide sewer service to currently unsewered area	$6,531,163.00	St. Clair
Champaign	Improvements to sanitary sewer	$817,707.00	Champaign
Champaign	Sanitary sewer extension	$705,502.00	Champaign
Champaign	Lining of sanitary sewer and manhole rehabilitation	$726,357.00	Champaign
Chicago	Approximentaly 21 miles of new sewer pipes	$20,000,000.00	Cook
Chicago	Line existing sewer pipes	$15,000,000.00	Cook
Clayton	New sanitary sewers	$321,796.00	Adams
Colona	Construction of a bar screen and demolition of old bar screen	$318,787.00	Henry
Crest Hill	Lining of unlined sanitary sewer main	$6,119,271.00	Will
Cuba	sewer cleaning, video inspection and installation of cured-in-place pipe lining	$285,022.00	Fulton
Decatur SD	Cleaning old, and installing new sewer lines	$2,417,575.00	Macon
Decatur SD	Replacement of and repair of another Interceptor Trestle	$3,160,005.00	Macon
Dekalb SD	Upgrade & rehabilitate the biosolids handling process	$4,060,786.00	DeKalb
Dekalb SD	Renovations of the Tertiary Filter Building	$2,199,073.00	DeKalb
DePue	Improvements to WWTP	$267,650.00	Bureau
East Galesburg	New sanitary sewer collection system and sewage treatment facilities	$302,084.00	Knox
East Moline	Rehabilitate and upgrade components throughout WWTP	$8,287,785.00	Rock Island
Eldorado	Improvements to WWTP	$1,734,330.00	Saline

Elmhurst	Construct a third anaerobic digester	$4,659,300.00	DuPage
Evanston	Sewer rehabilitation	$3,078,905.00	Cook
Fairbury	Lining and installing sanitary sewer pipe	$702,925.00	Livingston
Farmington SD	Complete rehabilitation of Fairview Rd pumping station	$657,706.00	Fulton
Flagg Creek WRD	replace existing rapid sand filters with cloth media disc filters	$3,479,245.00	Cook
Fox Metro WRD	Consists of 10,263 feet of 8 inch sanitary sewer, 2,191 feet of 10 inch sanitary sewer, and 55 manholes with an average daily flow of 67,600 gpd.	$1,917,105.00	Kane
Freeburg	Upgrade/rehabalitate gravity sewers, manholes, lift stations, pumps, and lagoon	$606,763.00	St. Clair
Freeport	City wide sanitary sewer lining and improvements	$9,059,782.00	Stephenson
Galesburg SD	Construction of a 6 million gallon overflow lagoon	$1,962,370.00	Knox
Glenwood	Replacement of force main, sanitary sewers and manholes	$3,084,041.00	Cook
Granite City	Sewer cleaning and cured-in-place liningof gravity sewers	$8,000,000.00	Madison
Granite City	Install an emergency electric generator, replace power meter, circuit breaker and pumps	$2,000,000.00	Madison
Granville	Construction of a new suction pump lift station	$1,162,408.00	Putnam
Granville	Lagoon dredging and repair	$260,080.00	Putnam
Hanna City	Rehabilitate sanitary sewers	$726,851.00	Peoria
Havana	Sewer rehabilitation and storm sewer separation	$930,784.00	Mason
Hinsdale	Sewer System on Garfield Street between Fourth Street and First Street in the Village of Hinsdale.	$444,160.00	Dupage
Hinsdale	Sewer seperation including rehabilitation of sanitary sewer and new storm sewer system	$3,683,300.00	DuPage
Joliet	Improvements to sewer treatment plant	$1,551,846.00	Will
Joliet	Improvements to liftstation and new force main and sanitary sewer	$12,138,708.00	Will
Kankakee River Metropolitan Agency	Rehabilitate screw pumps and install new generators	$13,752,410.00	Kankakee
Kankakee River Metropolitan Agency	Replacement of anaerobic digestion system, new post-aeration system, and equiptment replacement	$15,000,000.00	Kankakee
Kimberly Heights SD	Install cured-in-place sewer main pipeline	$330,000.00	Cook
Kirkwood	Collection system improvements to the interceptor system and WWTP to a modified aerated lagoon system	$4,021,808.00	Warren
Knoxville	New step screen and chlorination building as well as misc. repairs and painting	$1,228,713.00	Knox
Ladd	Installation of storm pipe, manholes, and storm water inlets	$1,973,801.00	Bureau
Lindenhurst	STP upgrade	$11,935,030.00	Lake
Mahomet	WWTP improvements	$13,473,000.00	Champaign
Marion	Replacement of force main, sanitary sewers and manholes	$1,583,686.00	Williamson
Marion	Replacing pumps and installing new generators	$2,793,137.00	Williamson
Marquette Heights	Cleaning, installing cured-in-place lining and inspection of sanitary sewer	$797,549.00	Tazewell

Metamora	Rehabilitate sanitary sewers	$933,218.00	Woodford
Mount Morris	Replacement of WWTF	$12,000,000.00	Ogle
MWRDGC	Phase I, 39th St. Conduit rehab	$33,696,083.00	Cook
MWRDGC	Improvements to sludge thickening facilities	$55,000,000.00	Cook
MWRDGC	Improve sludge thickening facilities	$40,000,000.00	Cook
MWRDGC	Improvements to the WWTP	$16,544,994.00	Cook
MWRDGC	Construction of aeration tank and lower service gallery extension	$6,607,509.00	Cook
MWRDGC	Rehabilitation of intercepting sewer	$7,575,320.00	Cook
New Athens	Improvements to the WWTP	$3,300,000.00	St. Clair
Pekin	Upgrades to the WWTP	$20,000,000.00	Tazewell
Pekin	Upgrades to the WWTP	$11,644,400.00	Tazewell
Pekin	Upgrades to the WWTP	$3,355,600.00	Tazewell
Pingree Grove	Modify existing WWTP	$813,338.00	Kane
Polo	Construct new WWTP	$8,778,716.00	Ogle
Princeton	Construction of excess flow lagoon and pump stations	$4,265,621.00	Bureau
Prophetstown	Improvements to main, generator, and sanitary sewer	$309,016.00	Whiteside
Pulaski County	Routing 57 sepetic tanks to a common force main	$462,946.00	Pulaski
Rock Falls	Installation of emergency generators and security fencing, and lining sanitary sewer	$654,443.00	Whiteside
Rock Island	Wet Weather Treatment System	$20,000,000.00	Rock Island
Rock Island	Wet Weather Treatment System	$15,000,000.00	Rock Island
Salt Creek SD	Demolition of old and construction of new tertiary filter building	$4,665,370.00	DuPage
Sesser	Phase one of two sanitary sewer rehabilitation	$229,782.00	Franklin
Shawneetown	Replacing/Rehabilitating pump stations	$332,361.00	Gallatin
Sheridan	Lining new sanitary sewer pipe	$177,638.00	LaSalle
Shiloh	New lift stations, force main, sanitary sewer, and manholes.	$1,695,676.00	St. Clair
Springfield SD	Final funding for Spring Creek WWTP	$20,000,000.00	Sangamon
St. Charles	New main and sludge handling building	$9,595,815.00	Kane
St. Clair Township	Construction of UV disinfection system	$410,079.00	St. Clair
Stookey Township	Upgrading and expanding the STP	$12,539,102.00	St. Clair
Tampico	Replacement of the aeration system and new lift station with sanitary sewer and force main	$226,073.00	Whiteside
Taylorville	Upgrade and replace outdated equiptment	$985,000.00	Christian
Tuscola	Repace pump, new generator, and forcemain	$239,945.00	Douglas
Westchester	Replacement of sewer mains, rehabilitation of sanitary sewers and manholes	$1,168,606.00	Cook
Wilmette	Rehabilitation of collection system	$772,111.00	Cook
Wilmette	Rehabilitation of collection system	$848,344.00	Cook

Winslow	New WWTP	$960,478.00	Stephenson
Wood River	Sepertion of combined sewer into new storm and sanitary sewer	$9,544,893.00	Madison
Woodhull	New liftstation	$171,327.00	Henry
		$588,796,789.00	**Total**

Drinking Water Loans in 2011 and 2012

Recipient	Project Description	Loan Amount	County
Alsip	Construction of booster pump station	$2,868,222.00	Cook
Anna	New ground water storage tank, pumps and mains	$1,200,000.00	Union
Arcola	Installation of new water main	$1,104,838.00	Douglas
Ashkum	Blast cleaning and repainting the interior and exterior of the storage tank	$237,485.00	Iroquois
Ashton	New water mains and painting of water tower	$491,462.00	Lee
Bannockburn	Water main replacement	$1,211,736.00	Lake
Bellwood	Installation of new water main	$1,803,021.00	Cook
Bethalto	New WTP	$6,000,000.00	Madison
Bismarck Comm. WD	New well and water treatment plant	$700,000.00	Vermilion
Bloomington	Replacement of watermains	$2,952,890.00	McLean
Blue Island	Rehabilitation of an elevated and an inground storage tank	$1,200,000.00	Cook
Bond Madison Water	Booster Pump Station with two pumps complete with piping and valves.	$500,000.00	Bond
Broadview-Westchester	New portable water pump station	$4,775,481.00	Cook
Caterpillar Trail PWD	Installation of approximately 224 feet of 8 inch and 4 feet of 6 inch water main along with the rehabilitation of a 250,000 gallon elevated water storage tank.	$332,104.00	Woodford
Chandlerville	New WTP with detention tanks and service pumps	$1,105,952.00	Cass
Chapin	New mains, and improvements to aerator and detention tank	$2,405,430.00	Morgan
Chicago	Install water meters	$2,000,000.00	Cook
Chicago	Replace and repair 6.62 miles of pipe	$8,000,000.00	Cook
Chicago	New and replacement water meters	$7,500,000.00	Cook
Clayton-Camp Point	New generators and water mains	$2,450,460.00	Adams
Clinton	New raw water supply well, including drilling and developing the well and well house	$1,202,998.00	DeWitt
Dawson	Replace aelelater and hatches, and upgrade SCADA system	$429,692.00	Sagamon
DeKalb	New watermain and necessary appurtenances	$396,000.00	DeKalb
Divernon	Rehabilitation of elevated storage tank and replacement of water mains	$441,547.00	Sagamon
Dix-Kell Water & Sewer Commission	Construction of two booster pump stations	$1,003,681.00	Jefferson
Du Quoin	New water mains	$838,056.00	Perry

DuPage Co. Dept. of Public Works	Major improvements to the existing water distribution system, abandonment of well and TP, and new elevated storage tank	$5,163,595.00	DuPage
East Moline	Construction on new water main	$470,256.00	Rock Island
Fairbury	New water mains, pipe casings, and hydrants	$682,232.00	Livingston
Fairfield	Construction of a new WTP	$8,799,641.00	Wayne
Fithian	New well, pump, and mains	$241,035.00	Vermilion
Freeport	Construction of elevated water storage tank and pressure reducing stations, and new wells	$9,873,218.00	Stephenson
Fulton	Water main extensions, TP filter, and new wells	$3,571,676.00	Whiteside
Glencoe	New water main and replacing old sanitary sewers	$3,369,816.00	Cook
Greenville	New water mains and hydrants	$529,335.00	Bond
Hainesville	New water mains and hydrants	$259,011.00	Lake
Kewanee	Replacement of water mains	$900,000.00	Henry
Kirkwood	Drilling, developing, and connecting new well	$430,000.00	Warren
Knoxville	Clean and repair elevated storage tank & replace ground tank	$568,426.00	Knox
Lafayette	Blast cleaning and repainting the interior and exterior of the storage tank	$ 65,853.00	Stark
Lake Iroquois Assoc.	Replacing WTP with iron removal and water softening treatment plant	$1,464,000.00	Iroquois
Lena	New water well and well test, water tower and main, and SCADA	$4,098,641.00	Stephenson
Longview	New water treatment plant	$221,500.00	Champaign
Macon	Construction of a new water tower	$952,354.00	Macon
Merrionette Park	Installing new and modifying existing pumps	$784,892.00	Cook
Montgomery	Rehabilitation of a piping, pumps, motors, and misc appurtenances	$4,336,971.00	Kane
Morrison	Drilling a well, replacing one and demolishing one	$3,326,509.00	Whiteside
Neponset	New Water Treatment Facility	$784,113.00	Bureau
Nokomis	Installation of water main, valves, hydrants, and fittings	$939,544.00	Montgomery
Norridge	New water main and misc restoration	$526,627.00	Cook
North Park PWD	Construction of a new booster pump and additional mains	$822,842.00	Winnebago
Okawville	New elevated water storage tank and foundation	$545,816.00	Washington
Paw Paw	Instalation of water main and appurtenances	$287,644.00	Lee
Peoria Heights	New well, pump, and well house	$1,600,000.00	Peoria
Princeton	Construction of a new WTP	$10,000,000.00	Bureau
Princeton	Construction of WTP	$7,500,000.00	Bureau
Princeville	Drill, develop, and connect well plus new main	$832,774.00	Peoria
Rockford (Comp MCL Ra Water Mains)	New water mains	$3,611,244.00	Winnebago
Rolling Meadows	Replacement of watermains and appurtenances.	$1,317,920.00	Cook

Scott-Morgan-Greene Water Cooperative	Improvements to mains, valves, hydrants, and meters	$234,565.00	Morgan
Stockton	Replacing water mains	$1,220,433.00	Jo Daviess
Taylorville	Rehabilitation of the elevated water storage tank	$692,227.00	Christian
Tonica	Water main extensions	$100,000.00	LaSalle
Tower Lakes	Replace water mains, valves, vaults, connections, hydrants, steel casing pipe, etc.	$1,283,867.00	Lake
Tuscola	New water mains, pipe casings, and hydrants	$891,583.00	Douglas
Tuscola	Full blasting and coating of water tower including exterior, submerged surfaces, and piping with in the valve vault of water	$603,560.00	Douglas
Victoria	Rehabilitation of elevated storage tank and replacement of ground tank	$335,621.00	Knox
Virden	Construction of elevated water storage tank and new automatic meters	$1,822,129.00	Macoupin
Volo	Improvements to the water distribution system	$2,223,058.00	Lake
Wataga	New mains, meters, and valves	$298,545.00	Knox
Waverly	Retrofit the existing filters	$897,459.00	Morgan
Western Springs	Replace old lime softening water treatment plant with a low pressure reverse osmosis plant	$8,030,520.00	Cook
Wilmington	Improvements to water treatment plant	$650,000.00	Will
Worden	New storage tank with corresponding pumps and mains	$1,071,768.00	Madison
		$152,383,875.00	**Total**

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.

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: In 2010, 2,935 wells tested and evaluated at CWSs across the state. Based upon available data, 2,714 (or 93 percent) of these wells are currently viewed as using a sanitarily safe source of groundwater. Of the 22 (or seven percent) CWS wells that have shown bacteria contamination 204 wells have taken necessary corrective actions. The remaining 17 are evaluating o have schedules for corrective actions. The Illinois EPA has initiated evaluation of potential correlations between bacteria occurrence, hydrogeology, and other factors.

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

GROUNDWATER USE AND ASSESSMENT

Groundwater assets underlie much of Illinois, offering drinking water resources to consumers in all parts of the state. Part of Illinois EPA's mission and statutory responsibility is to protect those resources.

According to the United States Geological Survey, Illinois uses approximately 15. 2 billion gallons of fresh water per day. Only a small percentage, 1.210 million gallons per day (MGD) is from groundwater sources. Groundwater in Illinois has many uses, however. They include 479 MGD or 40 percent for irrigation; 406 MGD or 35 percent for public water supplies; 128 MGD or 11 percent for industrial use; 101 MGD or 8 percent for domestic use, including private wells; 44 MGD or 3 percent for livestock use; 41 MGD or 3 percent for mining use and 7 MGD or one percent for thermoelectric sources.

93% of Illinois CWS wells appear to be using a safe source of groundwater.

In Illinois, about 3.7 million people use groundwater as a source of public water supply (PWS). There are 6,252 PWS in Illinois, of which 4,935 are groundwater dependent. There are 1,826 community water supplies (CWS) in the state, of which 1,195 are groundwater dependent. In addition, Illinois has approximately 4,446 non-community groundwater dependent systems that serve schools, restaurants, parks, and other businesses. Further, it is estimated that approximately 400,000 residences in Illinois are served by their own private wells.

The Illinois EPA utilizes three primary aquifer classes to assess the groundwater resources of the state. The three principal aquifers are sand and gravel, shallow bedrock, and deep bedrock aquifers. Approximately 58 percent or 32,000 square miles of the state is underlain by principal

aquifers. Of these, about 33 percent or 18,500 square miles are major shallow groundwater sources. Of the 3,517 active CWS wells that withdraw from these aquifers, 46 percent or 1,619 utilize sand and gravel aquifer; 27 percent or 934 utilize a shallow bedrock aquifer; and 24 percent or 825 utilize a deep bedrock aquifer with the remaining 3 percent or 139 undetermined.

The widespread use of chemical products, coupled with the disposal of large volumes of toxic waste materials, poses the potential for widely distributed groundwater contamination. Hazardous and non-hazardous chemicals are in widespread use in urban, industrial, and agricultural settings. Whether illegally disposed, accidentally spilled, or applied to the ground as part of a management practices, these chemicals can eventually reach and contaminate groundwater. Because of the volume of toxic wastes and their stability in groundwater, such contamination can pose a threat to public health. The Illinois EPA continues to coordinate with the Governor's Groundwater Advisory Council to respond to the increasing trend of contamination of CWS wells with volatile organic compounds. To this end, the Illinois EPA continues to evaluate impacts to groundwater resources by implementing an ambient monitoring network of CWS wells.

"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, the Illinois Department of Public Health regulated waste disposal and management practices, focusing on obvious threats such as 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 EPA to ensure groundwater protection and comprehensive oversight of interrelated environmental problems.

In response, Illinois EPA has developed – and continues to develop – new regulations and programs needed to fulfill its mission to protect public health and the environment. Implementation and enforcement of these regulations has resulted in significant improvement to 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 reduced, and all landfills meet design and performance standards to protect groundwater quality.

SAFE WASTE MANAGEMENT

During 2011, no new municipal solid waste landfills opened and no active landfills closed. Inspections of waste management facilities are conducted by personnel from Illinois EPA's seven regional field offices and our delegated partners. Our delegated partners include 17 counties, Ambraw Valley Solid Waste Agency and the City of Chicago. They have our Agency's authority delegated to them to inspect landfills, transfer stations and compost sites in their jurisdictions and to investigate citizen complaints about illegal dumping of waste.

Landfills

46.2 million gate cubic yards of municipal solid waste was disposed in 40 landfills in Illinois during 2011. This amount was one-tenth of one percent (0.1) percent more than

was accepted in 2010. One of these 40 landfills also was permitted to accept hazardous waste. All active landfills were open into 2012, including the new facilities of Atkinson Landfill, Atkinson and Clinton Landfill #3, Clinton, which opened in 2009. No new facilities opened in either 2010 or 2011.

Landfill operators report that 13.3 percent of that waste amount was accepted from 11 other states (besides Illinois), including the adjacent states of Missouri, Iowa, Wisconsin, Indiana, Kentucky and six other states. Twenty-two of the 40 landfills (55 percent) accepted more than 6.1 million gate cubic yards of waste from other states.

There are 23 years of landfill capacity remaining, as reported by 45 landfills. The capacity figure of one billion gate cubic yards of remaining capacity as of Jan. 1, 2012, is up less than one percent from the prior year. This figure included capacity from five inactive facilities in Fairview, Greenville, Harrisburg, Jerseyville and Streator. The figure for remaining capacity also included capacity from two landfill expansions permitted during 2011 at Veolia Environmental Services (ES) Zion, Zion and Rochelle Municipal Landfill No. 2, Rochelle. This total of more than one billion gate cubic yards of available capacity was up almost 2.8 million gate cubic yards from data reported a year earlier.

Inactive landfills may be allowed to "temporarily close"

Five landfills near Fairview, Greenville, Harrisburg, Jerseyville and Streator continued to remain inactive in 2011; although they again reported capacity remaining as of Jan. 1, 2012. Fairview's landfill, Spoon Ridge Landfill, has been temporarily closed since 2008, although it has been reporting the most available capacity for the past 14 years. An additional landfill: Bond County Landfill, Greenville reported it ceased accepting waste on March 31, 2010, and yet continues to report available capacity. Saline County Landfill, Harrisburg, ceased accepted waste on June 7, 2006, and is temporarily closed to this day. RCS Landfill Inc., Jerseyville, on Apr. 28, 2006, also became inactive for business reasons and continues inactivity, but reports capacity.

Permanent landfill closings affect local capacity

No landfills closed during 2011. However, two landfills reached their capacity limit and closed their gates during 2010. In Region Four, Clinton Landfill #2, Clinton, ceased accepting waste on June 15, 2010. This site closed after the Clinton Landfill #3 opened, across the street. In Region Six, Bond County Landfill, Greenville, closed on March 30, 2010. Salem Landfill, Salem, one of the State's few city-owned and operated landfills, closed on Oct. 15, 2010.

Landfills completing certification of closure include ERC/Coles County Landfill, Charleston on July 27, 2011.

Public versus Private Ownership and Operation of Landfills in Illinois

There are also counties that own and/or operate landfills. Whiteside County owns the Prairie Hill RDF in Morrison, in Northwestern Illinois (Region One). Will County owns Prairie View RDF in Joliet in the Chicago Metropolitan Area (Region Two) and Knox County located in the Peoria/Quad Cities area (Region Three) is the last public entity to both own and operate their own landfill; also the County of Peoria jointly owns the Peoria City/County Landfill No. 2 with the City of Peoria, but leaves its operation to a private entity.

Some cities in Illinois own landfills in the state, but do not operate them. For example in Region One, Northwestern Illinois, the City of Rochelle owns the landfill located there; and in Region Three Peoria/Quad Cities, the City of Peoria and the County of Peoria jointly own the Peoria City/County Landfill No. 2 through their Solid Waste Board.

The rest of the landfills in the state are both privately owned and operated.

Clean Construction and Demolition Debris (CCDD)

In July 2010, Public Act 96-1416 required Illinois EPA to propose rules to establish addi-

tional technical requirements for CCDD facilities; set operating standards for uncontaminated soil fill operations; and develop standards for the maximum allowable concentrations of chemical constituents in uncontaminated soil generated during construction or demolition activities and used as fill material at either type of fill site. The Illinois Pollution Control Board adopted the rules in August 2012 as amendments to 35 Ill. Adm. Code 1100. Stakeholders to the rulemaking included owners and operators of CCDD facilities and uncontaminated soil fill operations as well as governmental entities, road builders, landscapers, and other contractors and excavators that deliver CCDD or uncontaminated soil generated from construction or demolition activities to CCDD facilities and uncontaminated soil fill operations.

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.

Landfill Closures

An issue for local commerce is the closure of any of these active landfills. River Bend Prairie Landfill, Dolton is the only facility located in Cook County, and it is nearing closure. At the end of December 2009, CID RF #4, one of the State's two hazardous waste landfills closed, leaving just the one in Peoria, which is also nearing closure. Landfill closures also have an unfortunate resultant effect on revenues available to implement recycling and environmental education programs at the local level.

Landfill Life

Landfill disposal capacities vary widely within the various geographic areas of the state, ranging from 12 to 54 years. The Chicago Metropolitan area has the lowest landfill life expectancy of 12 years. Regions Three: Peoria/Quad Cities and Seven: Southern Illinois have the highest landfill life expectancy, 54 years. Years of capacity remaining statewide, as reported by landfill operators themselves, is 23 years.

Chicago Metropolitan Area's waste may be problematic

There is a moratorium against landfills within Chicago's city limits under Chicago's city ordinances. Land prices are high in Chicago.

On July 22, 2012 Governor Pat Quinn signed a new law to further protect the environment by preventing both new landfills from being built and existing landfills from expanding in Cook County. The city of Chicago has maintained a similar ban since 1983 and the new law, which has strong environmental group support, broadens the existing ban to cover the entire county. The law is designed to protect Cook County, which is densely populated, from air and water contaminants. River Bend Prairie Landfill, Dolton

Compacting and spreading garbage at a municipal waste landfill

is the only active facility located in Cook County, but it is nearing closure.

Therefore, waste generated by the Chicago Metropolitan region's population then may become a state-wide issue of interest to several Illinois counties. Also affected is available capacity in at least two adjacent states of Indiana and Wisconsin.

CLEANUP OF CONTAMINATED PROPERTIES

Open Dump Cleanups

The Open Dump Cleanup Program began in 2006 to clean up orphan open dump sites. Since inception, Illinois EPA has cleaned up more than 275 open dump sites located in every region of the state, sending approximately 42,000 tons of waste to landfills; 1,140 tons of recyclable metals to salvage yards; and 800 tons of used tires to permitted tire recycling facilities.

Leaking Underground Storage Tanks

Illinois EPA's Leaking Underground Storage Tank Program is in the top three nationwide when it comes to cleanups completed. Between October 1, 2010, and September 30, 2011, there were 829 cleanups completed, placing Illinois second in the nation. Between October 1, 2011, and September 30, 2012, there were 807 cleanups completed, placing Illinois third in the nation. Furthermore, for the twelfth consecutive year, the number of sites remediated has exceeded the number of new releases reported, thus reducing the backlog of open incidents. U.S. EPA's Region 5 office has highlighted Illinois' significant accomplishment in this area, as Illinois' contribution has helped U.S. EPA meet its national cleanup goals.

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

Confirmed Releases

Federal FY	This Year	Cumulative
FY 2008	632	24028
FY 2009	330	24358
FY 2010	370	24728
FY 2011	334	25062
FY 2012	367	25429

Cleanups Completed

This Year	Rank	Cumulative	Backlog
979	1	17188	6840
901	3	18089	6269
859	2	18948	5780
829	2	19777	5285
807	3	20584	4845

In December 2011, U.S. EPA's released The National LUST Cleanup Backlog: A Study of Opportunities. U.S. EPA's study analyzes the backlog of sites from fourteen states, including Illinois', and addresses why there are approximately 100,000 confirmed UST releases nationwide that have not been cleaned up.

The study identifies potential opportunities to reduce the backlog, which are identified in three areas:

1. Accelerate corrective action
2. Pursue target initiatives
3. Improve program implementation

In the coming years, Illinois' challenge is to cut into the backlog of open incidents. Illinois conducted a separate study of its backlog using an exploratory model to investigate and collect technical, economic, social, and demographic data relative to remediation of properties, where petroleum has leaked from state and federally regulated USTs, to predict whether a leaking UST site in Illinois is remediated and closed. Two key findings of the study are:

1. Longevity in age greatly decreases the probability of a site being remediated
2. Being next to a vacant site decreases probability of site being remediated

Therefore, the longer a property sits idle, the more difficult it is to remediate it, and the location of the property influences the likelihood of remediation and eventual redevelopment. The reuse of these sites depends on several parties, including the UST owner, environmental consultant, landowner, property developer, various municipal departments, investors, end users, real estate agents, Office of the State Fire Marshal, and the Illinois Environmental Protection Agency, working together to achieve a common goal.

Site Remediation Program (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 4,561 sites have been enrolled in the program, with 326 sites enrolling in 2011and 2012.

Superfund (National Priorities List)

As the Superfund Program finished its thirty-second year, construction had been completed at 31 of the 53 final, proposed and deleted National Priority List (NPL) sites in Illinois. This includes 44 sites on the Final NPL, four sites proposed to the NPL, and 5 sited deleted from the Final NPL. Since the last report, three sites have been added to the NPL, two sites have been de-Proposed from the NPL, and all necessary remedial actions have been completed at two sites, which have been deleted from the NPL. Completion of construction qualifies the site for deletion from the NPL.

There are 13 sites with on-going remedial actions (including long-term remedial actions). At these sites, there are 25 individual remedial actions taking place, 19 of which are being funded by responsible parties, continuing the long tradition of "The Polluter Pays" within the Superfund program (76 percent of the remedial actions are being funded by the responsible parties).

To date, Illinois EPA, in conjunction with the United States Environmental Protection Agency and Potentially Responsible Parties has remediated over 4869 acres (7.61 square miles) of the most heavily contaminated properties in Illinois.

Federal Facilities

Sites addressed by the Federal Facilities Program include some of the largest properties undergoing environmental remediation in Illinois. These sites have shown tremendous potential for economic redevelopment, such as the Former Naval Air Station Glenview and Fort Sheridan, and restoration of wildlife habitats, such as the Former Joliet Army Ammunition Plant NPL Sites and the Former Illinois Ordnance Plant (now the Crab Orchard National Wildlife Refuge NPL Site)). Since 1995, at least partial remediation has been completed at 94 sites encompassing some 46,866.34 acres (70.1 square miles).

Resource Conservation and Recovery Act (RCRA) Corrective Action

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

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 2011 and 2012 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 2012 over 1,325 acres were remediated by this program. Work has been completed on 168 sites in over 110 communities.

Waste tires are loaded for recycling.

Used Tires

Illinois EPA's Used Tire Program is responsible for regulating the used tire industry and removing used tires from the environment. Improperly-managed used tires pose a significant health threat as a prime breeding habitat for disease-carrying mosquitoes. Of particular concern is Culex pipiens (Northern House Mosquito), which is the primary carrier of the West Nile virus and is commonly found in improperly managed used tires. Human health and environmental threats also exist as a result

of tire fires, which can be minimized by ensuring compliance with the applicable statutes and regulations, and by working with local authorities to make them aware of the potential risks and preferred firefighting methods to control tire fires.

Illinois EPA conducts more than 1,200 inspections annually at used tire generators, storage sites, transporters, processors, and other handlers to ensure compliance with environmental requirements. In addition, management and field staff are licensed pesticide applicators who routinely apply larvicide when mosquito larvae are present in used tires. Illinois EPA will continue to conduct a strong compliance and enforcement program regarding the management of used tires, particularly those at large storage and commercial processing facilities that sometimes accumulate large quantities of used tires in one place.

The Used Tire Program has removed more than 20 million used and waste tires from the environment over the past 23 years via consensual removals, countywide collections, removal actions for units of local government, and forced removals where used or waste tires pose a threat to human health and the environment. Illinois EPA is currently working with the Illinois Attorney General's Office on several cases where large non-compliant commercial processing facilities may necessitate the removal of large amounts of used tires by Illinois EPA contractors. Funding for used tire removal

IEPA has collected millions of waste tires for recycling.

actions is provided by the $2.50 tire user fee assessed to tire retail customers in Illinois.

Markets for used tires are down nationwide in all areas: tire-derived fuel, crumb rubber, civil engineering applications, rubber-modified asphalt, etc.This has resulted in commercial processors having difficulty producing and selling their rubberized fuel/products to supply legitimate reuse and recycling markets. Stronger support of market development for the used tire industry is needed to make sure used tires are being reused and recycled and to prevent open dumping of used tires in our neighborhoods, particularly in Environmental Justice areas that are vulnerable to this kind of activity.

Household Hazardous Waste Collections

With the assistance of local governments, the Illinois EPA sponsored six one-day household hazardous waste collection events in 2011 and 2012 at a total cost of over $635,000. This cost does not include Illinois EPA administrative expenses or the costs to local co-sponsors for event publicity, traffic control or other locally provided services. Over 2,356 drums of waste were collected at the events. Since the program began in 1989, 471 one-day collection events have been held, with more than 83,056 drums of waste being collected from approximately 426,799 households. All of the collected wastes were disposed of or recycled at Illinois EPA-approved facilities.

Household hazardous waste drop-off

Illinois EPA also maintains Intergovernmental Agreements with four host communities to operate long-term household hazardous waste collection programs. These long-term programs are coordinated with the City of Naperville, the City of Rockford, the City of Chicago and with the Solid Waste Agency of Lake County in Gurnee. In 2011 and 2012, the Illinois EPA provided over $1,896,000 for disposal of more than 10,076 drums of waste collected through these programs.

Partners for Waste Paint Solutions

Paint accounts for approximately 25 percent of the waste collected at Illinois EPA-sponsored one-day Household Hazardous Waste events. To address this high volume waste stream, 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 can be reformulated or remixed for reuse. In 2011 and 2012, Illinois EPA coordinated with seven paint partners to collect over 1,200 drums of unwanted paint for reuse or disposal. The total cost incurred by Illinois EPA in 2011 and 2012 for this program was $213,600.

School Hazardous Waste Collections

In 2011 and 2012, Illinois EPA coordinated hazardous education collection events at eight schools throughout the state. These collections resulted in over 15 drums of waste being disposed of at Illinois EPA-approved disposal facilities and cost the state $21,000. Hazardous education waste is chemical waste generated as part of school curricula and includes laboratory wastes, expired chemicals, unstable compounds, mercury-containing items, toxic materials, and flammable materials. Since 1996, Illinois EPA has conducted 927 hazardous education waste collections.

E-Waste

Electronic waste, e-waste and e-scrap are all terms used to describe unwanted electronic products. Home electronics use has expanded significantly over the years and with a constant supply of faster electronic products on the market, older models are continually replaced. As a result, electronics have become one of the fastest growing waste streams.

The Illinois Electronic Products Recycling and Reuse Act requires manufacturers of a set list of covered electronic devices (CEDs) to begin recycling electronics that are produced from Illinois households. The Act establishes a statewide program where manufacturers who sell any of the 17 CEDs in the State of Illinois are required to register, pay a registration fee and meet their recycling goals. Manufacturers are assigned a recycling goal each year based on a certain percentage of their sales from a previous year. Additionally, beginning January 1, 2012, all CEDs and eligible electronic devices (EEDs) were banned from landfills.

For the past two years, manufacturers have not only met the overall Statewide goal but have exceeded it. For Program Years 2011 and 2012, approximately 75 million pounds of residential e-waste was recycled; over 32 million pounds in 2011 and nearly 43 million pounds in 2012. For Program Year 2013, the manufacturer overall statewide goal is 47,362,714 pounds.

Brownfields

Brownfields are properties at which redevelopment is hindered by the presence or perceived presence of environmental contamination. The Office of Brownfields Assistance provides technical and financial support for the assessment and cleanup of these properties. The Brownfields Cleanup Revolving Loan Fund provides loans of up to $1 million per borrower for site cleanup. In 2011 and 2012, loans totaling $3,652,621 were awarded to four municipalities and two nonprofit organizations. The Office of Site Evaluation offers limited assessment services to municipalities to determine the location and extent of contamination and the need for remedial action at brownfield sites. On average, six assessments are conducted each year.

ARRA Leaking Underground Storage Tank Cleanup Program

Illinois EPA received $7.4 million in 2009 under the American Recovery and Reinvestment Act (ARRA) program to clean up leaking underground storage tanks from abandoned gas stations. The ARRA Grant was completed on December 31, 2011.

Work was done on a total of 50 sites utilizing ARRA funding. A total of 30 abandoned sites were closed utilizing ARRA funding through the end of 2011. An additional 5 abandoned sites that were initiated with ARRA funding were completed in 2012 utilizing state funding.

Projects were located in communities in all areas of the state, from Freeport in the far north to Cairo at the southern tip of Illinois.

For example, one of the completed projects in 2011 involved remediation of a long-abandoned property on the square in Toledo that became a restaurant across from the County Courthouse.

The projects were able to be done on a more expedited basis than usual because they were primarily "shovel ready" and Illinois EPA used experienced remediation consultants and contractors to perform the clean-ups.

The ARRA grant officially ended in 2011 with minimal state funding used in 2012 to complete the projects initiated under ARRA.

"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.

In recent years Illinois' air monitoring network has undergone a number of changes as equipment is updated to the latest technology. Several sites and monitors were discontinued in areas where ambient air quality concentrations have not shown emissions in excess of standards over the course of five years, and with values significantly below the relevant National Ambient Air Quality Standards (NAAQS). In addition, new monitors were either added or are in the process of being added, where they were required by regulation or as otherwise determined to be needed for air quality information.

The hot weather in 2011 resulted in more than 40 temperature records either tied or broken, however, overall air quality for the year was either good or moderate 92 percent of the time, a slight increase from 2010.

Significant progress continues to be made in terms of air quality in the state. As with previous years, the 10-year air quality trends continue to show decreases in all criteria pollutants. The Illinois EPA continues efforts to meet the NAAQS, even as standards continue to be tightened. The Illinois EPA also strives to provide the most accurate information to residents about our air quality through annual Air Quality Reports and other outreach and informational efforts.

The Air Quality Index (AQI) has continued to show a trend of fewer days when the air quality in some part of Illinois was considered unhealthy. Illinois currently has two areas designated as non-attainment areas, which do not meet the most recent federal standards for ozone and fine particulate matter (PM2.5), specifically, the greater Chicago area consisting of six counties and several townships, as well as the East St. Louis metropolitan area consisting of three counties and a township.

Permit Streamlining, Greenhouse Source Permitting, Fee Increase

On July 12, 2011 Governor Quinn signed into law Public Act 097-0095/House Bill 1297 (the

full text can be found here: http://www.ilga.gov/legislation/publicacts/97/097-0095.htm). This Act was the result of an effort by the Illinois EPA and Industrial Source Representatives to address pending critical issues facing the respective parties. In particular, three issues were addressed:

1. The Illinois EPA Division of Air Pollution Control (DAPC) faced financial instability as a result of shrinking revenues and growing expenses;
2. DAPC needed to make changes to the Illinois Environmental Protection Act in order to meet the greenhouse gas (GHG) permitting requirements of the federal GHG regulations; and
3. Business' in Illinois wanted a more streamlined permitting process.

The revisions to the Act address the revenue issue by increasing operating permit fees across the board and providing additional funding for the Clean Air Act Permit fund. These new fees helped to ensure financial stability.

The Act clarifies that GHGs are now regulated air pollutants that are subject to regulation in Illinois consistent with federal regulations. The Act also establishes a permit exemption for sources of GHGs emissions that are not subject to the federal Tailoring Rule that these sources are not required to obtain a permit solely due to their GHG emissions. Also, the Act states that if the federal regulations are preempted

IEPA air monitor on roof

by legislation, judicial, or Presidential action, then the GHG provisions of the Act are likewise preempted. Finally, the Act states that Illinois EPA will not charge a fee for GHG emissions.

The Act contains several provisions that seek to make the permitting process in Illinois more efficient and effective across all media, i.e., air, land and water. Such provisions include the following:

1. A new Registration of Smaller Sources (ROSS) program for small air pollution sources (more below).
2. A requirement to review and implement, if appropriate, the use of additional General Permits.
3. A requirement to review and implement, if appropriate, the use of Permit by Rule.
4. A provision providing for applicants to request expedited permitting upon payment of additional fees.
5. A requirement that the Illinois EPA develop a Web Portal that provides guidance and assistance to permit applicants in the form of online application forms and status tracking, electronic application submittal, and other useful tools.
6. Requires that the Illinois EPA notify applicants of the assigned permit analyst upon request.
7. Clarifies that permit guidance documents shall not be considered rules and shall not be binding on any party.
8. Clarifies that applicants may submit suggested permit language, that the Illinois EPA is not required to use such language, and that the Illinois EPA shall meet with the applicant to discuss such language upon request;
9. Requires that the Illinois EPA provide applicants with a draft of their permit both prior to public notice and prior to issuance, upon request.

Registration of Smaller Sources

The Registration of Smaller Sources (ROSS) Program began implementation in 2012. The ROSS program is designed to benefit both the Illinois EPA and Illinois' small businesses by removing permitting requirements and other

associated administrative burdens and costs for the smallest air pollution sources, while having no significant impact on air quality. Full implementation of the ROSS will allow Illinois EPA to redirect staff and resources toward the larger and most polluting emission sources. Devoting more staff resources toward fewer sources is anticipated to reduce the timeframe to acquire a permit and to allow the Illinois EPA to be more responsive to the needs of the permit applicant, the public, and the environment. Smaller businesses will save time and money as their air permit related requirements are substantially reduced once they register.

Redesignations to Attainment and Clean Data Findings

As a testimony to the success of the air pollution control programs, USEPA redesignated both the Chicago and Metro-East St. Louis areas as attainment for the 1997 8-hour ozone standard. The National Ambient Air Quality Standards are required under the Clean Air Act and are health-based standards set for pollutants considered harmful to public health and the environment from numerous and diverse sources. The primary standards are designed to protect human health, with an adequate margin of safety, including sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases.

Illinois also obtained clean data findings in regards to the 1997 24 hour PM2.5 standard for both areas. A clean data finding means the air quality in the area has been determined by air monitoring data to be in attainment with the standards.

Enforceable Compliance Commitment Agreements (CCAs)

Public Act 97-519 was signed into law by Governor Quinn on Aug. 23, 2011. This Act provides that CCAs entered into to resolve environmental violation notices issued by Illinois EPA will, for the first time, be enforceable through civil penalties. In the first federal fiscal year after the signing, the Illinois EPA Bureau of Air issued 47 CCAs and 14 Consent Orders that were reportable to USEPA as formal enforcement actions. Without this change in the law, the BOA would have reported just 14 formal enforcement actions from the Consent Orders. Reporting of enforcement action declared by USEPA to be "formal" enforcement is required under Illinois' delegated federal programs. This information, along with other compliance and enforcement information, is available to the general public through USEPA's Enforcement and Compliance History On-line Database, and allows for comparison of Illinois' enforcement and compliance data to that of other states.

Multi-Pollutant Reduction Agreements with Coal-Fired Power Plants

Illinois EPA continues to implement its historic emission reduction agreements with Illinois' largest owners of coal-fired power plants. These reductions were originally agreed to during the rulemaking process for the Illinois mercury rule and the Clean Air Interstate Rule (CAIR). These agreements, standardized in rules, have resulted in the elimination of thousands of tons of sulfur dioxide and nitrogen oxides each year, with more to come. Illinois continues to remain one of the few states with tough mercury standards that already require units to have mercury controls in operation.

Illinois CAIR provides for even more reductions in sulfur dioxide and nitrogen oxide throughout Illinois and the Illinois rule went beyond the reductions contemplated under the federal CAIR. The rule contains incentives for coal plants to install costly and effective pollution control equipment as well as additional incentive to install such controls early. The Illinois CAIR also provides substantial incentives for energy efficiency, renewable energy (such as wind and solar projects), and clean coal projects.

Lead

In 2008, USEPA revised the National Ambient Air Quality Standard (NAAQS) for lead to reduce allowable concentrations of lead in ambient air by 90% from the previous standard. The previous standard of 1.5 micrograms of lead per cubic meter of ambient air, and was revised to 0.15 micrograms per cubic meter. This resulted in two areas in Illinois being designated as nonattainment for the 2008 lead NAAQS based on existing monitoring data. The Clean Air Act requires Illinois to take

appropriate actions to demonstrate it can bring these areas into attainment of the 2008 lead NAAQS. As a result, Illinois drafted and is moving forward with Lead emission control rules designed to bring the state into attainment with the lead NAAQS.

The two parts of the States designated as nonattainment are an area in the East St. Louis metropolitan area and an area in Chicago. The East St. Louis area consists of Granite City Township and Venice Township, and is generally referred to as the Granite City nonattainment area. The lead pollution source that will be affected by the rule in the Granite City nonattainment area is Mayco Industries, a manufacturer of various lead products. The other impacted area is referred to as the Pilsen nonattainment area in Chicago surrounding the H. Kramer brass and bronze foundry that is bounded by Damen Ave. on the west, Roosevelt Rd. on the north, the Dan Ryan Expressway on the east, and the Stevenson Expressway on the south. H. Kramer

The proposed regulation addresses these two lead sources in the nonattainment areas and requires them to operate pollution control equipment that meets stringent limits and to significantly reduce the amount of lead emitted. Both of the sources affected by the rule will need to install new pollution control equipment and reconfigure existing controls to limit lead emissions to meet the new standards in the rule. The proposed regulation will also require additional emissions testing specifically for lead, and additional monitoring, recordkeeping, and reporting for the affected sources.

The regulation, when adopted, is expected to ensure that the areas surrounding these lead air pollution sources meet the 2008 NAAQS for lead. The Illinois EPA uses computer modeling of these sources and looks at what their maximum emission rates will be when the proposed rule is effective to determine whether the NAAQS will be attained at all locations outside the property boundaries of these affected sources. Agency modeling, which uses conservative assumptions about the impact of the rule, shows that the proposed regulation should bring the areas into attainment with the lead NAAQS.

Illinois Green Fleets: Clean Diesel Grants, Alternate Fuel Rebates, & More

The Illinois EPA continues to provide clean diesel grants to "clean up" existing diesel-powered vehicles as well as repower or upgrade older, high-emitting engines in off-road equipment to much cleaner standards. In addition, rebates for alternate fuel vehicles have led to greater implementation of natural gas, propane, and electric vehicles, and the use of E85 and biodiesel fuels, with both fleets and the general public. For more information on these and other Illinois Green Fleet programs and initiatives, please visit our website at www.illinoisgreenfleets.org.

Illinois Clean Diesel Grant Program

The Illinois EPA is entering its 10th year in issuing grants to help clean up diesel-powered vehicles and equipment in Illinois. Beginning in 2003 with funding school bus projects throughout Illinois, the Agency continues to be awarded federal grant dollars to pass along to school districts in the Chicago area and many other rural and urban areas of the state. Specifically, the Illinois Clean Diesel Grant Program has provided over $21 million in clean diesel grant funding for over 400 projects throughout Illinois impacting nearly 9,000 vehicle or equipment units. The program has resulted in the purchase of several types of aftermarket products to be installed on diesel-powered vehicles or equipment to reduce emissions, especially particulate matter, and to decrease truck, bus, and locomotive engine idling. The types of products that have been funded include diesel oxidation catalysts, closed crankcase ventilation systems, auxiliary power units, direct-fired heaters, battery-powered air conditioning systems, diesel particu-

late filters, new off-road engines certified to cleaner emission standards, and diesel-hybrid trucks and buses.

The Logsdon Tug Company in Beardstown received clean diesel funding for the installation of new Caterpillar and John Deere marine engines on the Pin Oak operating on the Illinois River.

During 2011 and 2012, the program received over $12 million for clean diesel projects, with much of this funding being targeted for the Chicago area to help improve air quality. The Illinois EPA received over $5 million for clean school bus projects, and another $5 million for engine repower and upgrade projects for off-road equipment (i.e., marine tugs, construction equipment) for the Chicago area. Much of this funding remains to cover projects over the next four years. IEPA also received a smaller amount for projects in the rest of the state. Lately, the Illinois EPA has funded new, cleaner engines for tug boat operations to assist small marine businesses in Illinois' river communities. These projects support Illinois' engine industry by utilizing both John Deere and Caterpillar marine engines. A family-owned tug company operating on the Illinois River in Beardstown (Cass County) was one grant recipient, with the others including tug operations in the Metro-East area on the Mississippi River and a car-passenger ferry operation in Calhoun County crossing both the Illinois and Mississippi rivers. Another type of project involved the installation of idle reduction equipment on two locomotives in Mound City (Pulaski County) that operate near the Ohio River.

Illinois Alternate Fuels Rebate Program

The Illinois Alternate Fuels Rebate Program continues to grow and expand in assisting many local governments and businesses in implementing alternate fuel vehicles throughout the state. Since 1998, over 5,500 applicants have received over $11 million for the implementation of 11,000 alternate fuel vehicles. In 2011 and 2012, the program experienced an increase in natural gas, propane, and electric vehicle applications, topping $5 million. E85 and biodiesel fuel rebate applications continue to be strong, accounting for millions of gallons of Illinois' biofuels being used by the general public and many fleets. Electric vehicle rebates, for vehicles such as the Chevrolet Volt, Nissan Leaf, and Mitsubishi Miev, have also helped to stimulate the EV market in Illinois. The Agency is a member of the Electric Vehicle Advisory Council and has worked with its members in conducting electric vehicle forums throughout the state to disseminate information on the vehicles, charging stations and electric grid infrastructure.

Illinois Green Fleet Designations

The Illinois Green Fleets Program has many designated "green fleets" throughout the state. Our green fleets are committed to using alternate fuel vehicles that run on natural gas, propane, E85, biodiesel (B20), and electricity. Fleets that implement clean, American fuels into their operations and help to further the advanced technology vehicle and refueling infrastructure in Illinois can be designated as an Illinois Green Fleet and be recognized in public events hosted by our partnering coalitions. In 2012, the Illinois EPA and the Chicago Area Clean Cities coalition designated 15 more green fleets that serve as model examples for other fleets to consider implementing cleaner fuels and vehicles. These newest green fleets include Abt Electronics, Groot Industries, Competitive Lawn Service, Doreen's Pizzeria, Ozinga Ready Mix, SCR Medical Transportation, Northern Illinois University, Chicago Park District, Dillon Transport, Foodliner, and DuPage County Division of Transportation. To see which fleets throughout the state have been designated, please go to the www.illinoisgreenfleets.org website.

ILLINOIS PARTNERS FOR CLEAN AIR CONTINUES WORK WITH BUSINESSES AND CITIZENS

As a charter member of Illinois Partners for Clean Air, the Illinois EPA continues to serve as Chair of the non-profit organization dedicated to improving air quality through voluntary efforts. Since its formation in 1995, Illinois Partners has been dedicated to bringing cleaner air to the Chicago Metropolitan area, an area of the state that fails to meet current federal air quality standards. The coalition leads a variety of programs providing organizations, especially employers, with information and tools to help them take action to reduce air pollution at the local level.

Member Partners pledge to take actions to help reduce air pollution year-round, and take additional actions when Air Pollution Action Day Alerts are issued for the Chicago region. In addition to working with employers, the coalition also implements a number of educational programs to information businesses and individuals about the impact of and ways to reduce air pollution.

In 2011, Illinois Partners wrapped up their successful Green Pays on Green Days outreach program with a 10th and final hybrid vehicle giveaway. The 2011 season invited residents to "Tell us what you're doing to improve local air quality" for a chance to win an environmentally friendly prize and the Grand Prize 2012 Toyota Prius.

Open to residents in Northeastern Illinois, the program encouraged individuals to make small changes in their daily lives to improve air quality. Finalist names were drawn on days when the Chicago air quality was forecasted to be good or on "Green Days" according to the national Air Quality Index. The 2011 program had 35 Green Days from June to August. Ms. Katie Wollschlager of Tinley Park was the Grand Prize Winner for 2011. A teacher, Ms. Wollschager noted she was going to share the information she learned through the program with her students.

In 2012, Illinois Partners launched a full year-round initiative called Breathe Easy Save Easy. With a similar premise to Green Pays on Green Days, the new initiative encourages actions to reduce air pollution, while introducing a money saving aspect. Breathe Easy Save Easy launched with a year-long sweepstakes to reward participants with a chance to win monthly prize packages. It is also accompanied by a media campaign of the same name. The campaign notes that all of us have a stake in improving air quality in the decisions we make every day. Those decisions will not only help us BREATHE EASY, but they can also help us SAVE EASY.

Katie Wollschlager of Tinley Park was the 2011 Green Pays on Green Days Grand Prize winner of a new Toyota Prius.

Through the new year-round program, Illinois Partners and Breathe Easy Man, the clean-air superhero, travel through Northeastern Illinois spreading their air quality message. The Illinois Partners for Clean Air website, averaging nearly 5,000 visits per month, is another educational tool to provide information on air quality, including forecasts, types of pollution, and steps to take to reduce contributions to air pollution. The online Environmental Resource

Environmental superhero Breathe Easy Man greets some young fans at a clean air event.

Guide provides local contact information for agencies and organizations that specialize in programs such as RideShare, telework, regional transportation and more.

Illinois Partners for Clean Air consists of businesses, health advocacy organizations, and government entities 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 over a widespread area are expected to be at or above the Orange – "Unhealthy for Sensitive Groups" category for multiple days. The coalition is funded through a federal Congestion Mitigation Air Quality grant as well as corporate sponsorship funding. For more information, visit www.cleantheair.org.

Vehicle Emissions Testing Program

Automobiles and trucks are one of the single greatest sources of emissions that form ground-level ozone. Driving a malfunctioning vehicle is considered to be an Illinois citizen's "most polluting" daily activity. Modern vehicles are manufactured with a vast array of emission control devices, but inadequate vehicle maintenance and/or removal of these devices gave way to vehicle emissions testing programs in areas of the country with air pollution problems.

The vehicle emissions testing program identifies vehicles that do not meet federal standards and requires they be repaired before the vehicle registration can be renewed. Generally, 1996 and newer model year vehicles registered in areas of the state that are not in compliance with federal air quality standards (the greater Chicago and the greater East St. Louis areas) are tested every other year.

As technology used to test vehicle emission systems has evolved over the decades, so has Illinois' testing program. Since discontinuation of the limited exhaust gas/fuel cap test on January 31, 2012, more than 99 percent of these tests consist of quick, convenient On-Board Diagnostic (OBD) testing. OBD is an emissions control system that monitors the various emission control systems used on vehicles and identified problems that could cause the vehicle to become an excessive polluter. Through OBD testing, the Agency is able to retrieve specific information from the vehicle related to the various components and systems monitored. The Vehicle Emissions Testing Program performed approximately 4.1 million emissions tests during 2011 and 2012.

On-board diagnostic testing reduces vehicle emissions.

The testing program has a strong emphasis on customer service and motorist convenience, distributing an average of 2.2 million test notices annually and operating telephone call centers to respond to inquiries about the program. The program offers full-service and OBD-only centralized testing stations, and 40 test and repair stations operated by franchised repair shops.

Additionally, the program includes a Repair Industry Outreach unit that provides operation and administrative support to the repair industry, including a quarterly electronic newsletter, free seminars, test station tours, a Repair Effectiveness Index for individual repair shops, and support to repair technicians.

AIR QUALITY CONDITIONS IN ILLINOIS

Significant progress has been made in terms of air quality in the state. The Illinois EPA continues work to meet National Ambient Air Quality Standards (NAAQS), even as standards continue to be tightened.

The Illinois EPA monitors air quality for the six criteria pollutants (those for which air quality standards have been developed). Those pollutants include particulate matter (fine-PM2.5 and coarse-PM10), ozone (O3), sulfur dioxide (SO2), nitrogen dioxide (NO2), carbon monoxide (CO) and lead (Pb).

The Agency's monitoring network currently consists of 75 different site locations collecting data from more than 170 instruments. Each year, the Agency gathers data collected from our extensive air monitoring network and compiles an Annual Air Quality Report. Calculations are based on the Air Quality Index which includes the most recent federal air quality standards for ozone and fine particulate matter.

In terms of the Air Quality Index (AQI), a color-coded system which classifies air quality from good to hazardous, air quality for the year 2011 was either good or moderate 92 percent of the time. There were 31 days when air quality in some part of Illinois was considered Unhealthy for Sensitive Groups (category Orange), and there were zero Unhealthy (category Red) days in 2011.

Category, Color & Range	Precautions to take
Good 0-50	Everyone: Enjoy outdoor activities.
Moderate 51-100	People extra sensitive to air pollution: Plan strenuous outdoor activities when air quality is better.
Unhealthy for Sensitive Groups 101-150	Sensitive groups: Cut back or reschedule strenuous outdoor activities.
Unhealthy 151-200	Everyone: Avoid strenuous outdoor activities.

Air Quality Index

Comparatively, 2012 air quality was either good or moderate 86 percent of the time throughout the state. Illinois had 40 days where air quality in some part of the state was considered Unhealthy for Sensitive Groups (category Orange), and 11 days when air quality was considered Unhealthy. A significant contributing factor to 2012 air quality data was the widespread drought and record breaking temperatures experienced throughout the year.

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 2003 – 2012 are as follows: 24-hour particulate matter (PM10) – 8 percent decrease, annual particulate matter (PM2.5) – 21 percent decrease, 1-hour sulfur dioxide – 50 percent decrease, annual nitrogen dioxide – 30 percent decrease, 8-hour carbon monoxide – 48 percent decrease, lead – 5 percent decrease, and 8-hour ozone – 1 percent decrease.
Illinois residents can sign up to receive daily air quality forecasts at http://illinois.enviroflash.info/. Air quality notifications provide individuals with daily air quality as well as when air quality is elevated or at Air Pollution Action Days. As a result, individuals will know when to take necessary precaution to protect their health and to take action to reduce further contributions to air pollution.

Office of Emergency Response Emergency Operations Unit

2011 – 2012 Incidents

In 2011 and 2012, Illinois EPA's Emergency Operations Unit (EOU) staff handled 1,368 and 1,329 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 2011, 20 incidents prompted the evacuation of people. The majority of incidents, 1,144, were leaks or spills, while 31 were fires or explosions, 137 were gas or vapor clouds, and 107 involved waterways. In 2012, 10 incidents prompted the evacuation of people. The majority of incidents, 1,114, were leaks or spills, while 23 were fires or explosions, 133 were gas or vapor clouds, and 98 involved waterways.

Examples of Significant Incidents

Petroleum Pipeline Releases

In August 2012, an interstate pipeline owned by West Shore Pipeline Co. and operated by Buckeye Pipeline released approximately 29,400 gallons of jet fuel in Palos Park, Cook County. The release impacted soil and the Cal-Sag Canal. US EPA was involved in the response as well as Illinois EPA. The Illinois EPA referred this matter to the Illinois Attorney General's Office for enforcement. An Interim Agreed Order is in place and negotiations toward a final Consent Order are on-going. This was the latest in a series of releases from West Shore/Buckeye Pipelines which Illinois EPA has responded to, which also includes a release in Sharpsburg, Christian County. This release was from a Buckeye Pipelines pipeline in August 2011 and involved a farmer hitting a raised section of pipe releasing refined petroleum product. Illinois EPA issued a Violation Notice to Buckeye and resolved the matter with a Compliance Commitment Agreement.

Railroad Derailment and Yard Releases

In October 2011 an Iowa Interstate Railroad Train derailed in Tiskilwa, Bureau County. Approximately 300,000 gallons of denatured ethanol were released, resulting in the evacuation of nearby residents, a significant fire, impacts to soil and groundwater, and threats to private wells and surface water. Illinois EPA referred the incident to the Illinois Attorney General's Office for enforcement. An Interim Agreed Order is in place to guide further investigation and remediation. Negotiations toward a final Consent Order are on-going. This incident is an example of the increasing number of ethanol releases in Illinois as production/transportation of this fuel has increased. Illinois EPA is developing increased expertise in addressing ethanol releases, which behave differently than petroleum fuels and which have the potential to degrade into explosive levels of methane in the subsurface.

Also, in January 2011, a CSX locomotive derailed at the ADM facility in Decatur, Macon County. When it passed over a manual switch which was not set in the proper position it derailed resulting in a piece of track puncturing the fuel tank, releasing approximately 2,800 gallons of diesel fuel to the ballast and nearby drainage ditch. A large amount of fuel had soaked into the ground and a lengthy remediation followed. Illinois EPA issued a

Violation Notice to CSX and ADM and resolved the matter with a Compliance Commitment Agreement.

Refinery Incidents

In October 2012, the coker unit at the ExxonMobil refinery near Joliet, Will County, released a mixture of gas oil, thermocracked distillate, and thermocracked naphtha to the surrounding communities, surface water, and farmland. Illinois EPA spent considerable time addressing the concerns of local citizens as to possible exposures and worked to assure the impacted grain/produce was properly managed. Illinois EPA referred the matter to the Illinois Attorney General's Office and an Interim Agreed Order is in place. Off-site contamination has now been fully addressed, but the company and the Illinois EPA continue to negotiate about what the root cause(s) of the release were, as well as means to prevent future such occurrences. Illinois EPA previously addressed a significant occurrence from the coker in 1999.

In December 2011, the backup diesel power system for the Federal Aviation Administration Air Traffic Control Facility in Aurora, Kane County, suffered a power failure, releasing about 1,600 gallons to subsurface soils and storm drains, ultimately impacting a creek and the Fox River. Illinois EPA worked with the FAA to oversee cleanup and preventive/corrective measures to ensure that no future similar releases would occur. Illinois EPA issued a Violation Notice to the FAA and resolved the matter with a Compliance Commitment Agreement.

Crude Oil Operations

During 2011 and 2012, Illinois EPA responded to 29 incidents arising from releases of crude oil and brine from oil production facilities

operated by Petco Petroleum Co. in Fayette County. The majority of these incidents impacted "blue line" waters of the State. Illinois EPA has referred most of the Petco incidents to the Illinois Attorney General's Office for enforcement and litigation is on-going.

Agricultural Industry

During the period, there were numerous accidents involving farm vehicles transporting anhydrous ammonia nurse tanks on Illinois roads and farm fields. During 2011-2012, 122 agriculture related incidents were reported, most of which were releases of anhydrous ammonia. The resulting ammonia cloud caused respiratory problems, forced evacuations, impacted waterways, damaged crops, killed vegetation, halted traffic, etc. In response, the Illinois EPA, Illinois Department of Agriculture and the Illinois Fertilizer and Chemical Association (IFCA) representatives worked cooperatively to identify common

issues; pursue preventative measures; and IFCA develop communication tools for the farmer, retailer and general public to enhance awareness.

Facility Fueling System Releases

In February 2011, the fueling system at the Caterpillar engine testing facility near East Peoria, Tazewell and Woodford Counties, experienced a release of a large quantity of diesel fuel from an underground pipeline, which migrated into a ravine and caused impacts to Ten Mile Creek. While the majority of contamination was located on Caterpillar property, Illinois EPA oversaw a massive excavation project in the ravine area to ensure that further off-site migration would not continue. Illinois EPA also oversaw Caterpillar's redesign of its fueling system so as to prevent future such releases. Illinois EPA issued a Violation Notice to Caterpillar and resolved the matter with a Compliance Commitment Agreement.

Illinois EPA Division of Laboratories Provide Environmental Sample Analysis and Certify Environmental Laboratories

During both calendar years 2011and 2012 the Illinois EPA Division of Laboratories (DOL) reported over 200,000 tests from the 47 different analyses offered by the laboratory in addition to performing on-site audits at 31 Illinois laboratories for laboratory accreditation. DOL replaced the handwritten logbooks of bacterial testing of drinking water, records kept since the 1970s, with electronic record keeping via the Laboratory Information Management system (LIMS). Significant cost savings were achieved when some in-house changes were made to avoid the purchase of hydrogen generators and the laboratory was able to take out some battery back-up capability. The Agency Quality Management Plan (QMP) was revised by the Agency quality management team headed up by personnel from the Division of Laboratories, and that QMP received approval from USEPA Region V. Two long time agency employees retired, the laboratory undertook an ongoing reorganization, and the laboratory did a special project for the Bureau of Water to compare water color with chlorophyll levels.

- In both years, the Springfield laboratory analyzed both organic, inorganic, and microbiological testing for over 200,000 tests each, encompassing parts of all aspects of environmental testing including soil, water, drinking water, air, and fish.
- The laboratory accreditation unit certified 31 in-state laboratories with primary certification, and 41 out-of-state labs for secondary accreditation. This includes the updating needed for the federal programs with the Clean Water Act, Safe Drinking Water Act, and the Office of Solid Waste. One of the divisional employee serves on the national board for the environmental accrediting program, giving Illinois a voice in decisions that affect environmental quality nationwide. A Government Program Services Intern aided the unit for two years, and helped with the tracking of performance test samples and applications for accreditation.
- Coliform record keeping was switched to the LIMS system, replacing handwritten records kept since the Agency's start in the mid seventies. This switch enables faster retrieval of sample results, and easier searches of historical data.
- A short-term nationwide shortage of hydrogen encouraged the laboratory to evaluate and minimize its use of the gas in much of the sample analysis. After extensive consultation and research, the laboratory will continue to use that gas, but has greatly minimized the use of hydrogen in the laboratory. The alternative equipment would have cost approximately $80,000, and the laboratory has chosen to deal with the shortage and avoid spending the money for equipment that may well be unnecessary in another two years.
- Two highly experienced laboratory employees retired. Gary Germann, the division manager and laboratory manager, retired after 37 years with the state. He started working at the Agency the same day that the first gas chromatograph/mass spectrometer was installed, and was involved in all laboratory activities for many years. Mickey Grider, the laboratory equipment specialist retired after 25 years with the state. Many maintained many of the laboratory systems and was routinely called on for all the laboratory equipment.
- The Agency Quality team completed its every 5 year revision of the Quality Management Plan and submitted it to

USEPA region V. That (QMP) will serve until 2017, and supports the Agency in its on-going work of maintaining quality in its operations. The team is comprised of representatives from the bureaus of land, air, and water, and headed by the laboratory's quality officer. In addition the their work on the QMP, the team is doing training for sample-collection in all of the regional offices and doing internal audits in each bureau, the laboratory, and the laboratory certification unit.

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.

Enforcement and Compliance

In 2011-2012, Illinois EPA made 346 enforcement referrals to the Office of the Illinois Attorney General. In addition, the Illinois EPA also referred 61 other cases to local States' Attorneys and United States Environmental Protection Agency. Throughout 2011 and 2012, a total of 322 enforcement orders were finalized during the period, with more than $9 million in penalties assessed by the Illinois Pollution Control Board, United States Environmental Protection Agency or through court orders. Through the compliance process under the Illinois Environmental Protection Act, the Agency also issued 1,983 violation notices and approved 952 Compliance Commitment Agreements to resolve violations.

Enforcement Program

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In 2011, a total of 246 cases were referred to the Attorney General's Office, local States' Attorneys and United States Environmental Protection Agency and 161 enforcement orders were finalized, with penalties totaling $5,965,020 and $211,350 worth of SEPs.

Significant Cases/2011

People v. Bluff City Materials, Inc., 11-CH-7122 (Cook County)

Bluff City Materials, Inc. ("BCM") began receiving rock salt on its site in Cook County during August 2010. BCM is directly upstream from the protected Bluff Spring Fen, which is fed by groundwater. Loose salt handling practices led Illinois EPA to refer BCM to the Illinois Attorney General in a Section 43 referral for stormwater violations. BCM has ceased storage of salt on the Cook County property, thus stopping the threat to groundwater and the Bluff Spring Fen. In addition, this order provides for BCM to conduct groundwater monitoring with protection of the Fen as the objective. This order provides that the State "may require active remediation for chloride contamination," if there is an increasing trend in chlorides detected with the groundwater monitoring. Finally, BCM shall pay a civil penalty of $17,000.

People v. J.T. Einoder, Inc., Tri-State Industries, Inc., John Einoder and Janice Einoder, 00-CH-10635 (Cook County)

The Einoder case involves the open dumping of construction and demolition debris above grade at a site near Lynwood, Illinois. On June 29, 2009, the court found that the defendants are liable for violations of the Illinois Environmental Protection Act alleged in the complaint. On February 8, 2011, the court entered its order regarding the remedy and penalty in the case. The order directed the defendants to cease and desist from dumping waste at the site, and it directed the defendants to remove all waste above 631 feet in elevation above mean sea level. Additionally, the defendants are to submit a work plan for the clean up within 30 days of the entry of the order (March 10, 2011). All work is to be completed no later than 60 months after the entry of the order (February 8, 2016). A groundwater investigation plan is also to be submitted to the Illinois EPA within 30 of the entry of the order (March 10, 2011). Quarterly status reports are to be provided to the State, and the Illinois EPA is to be reimbursed for certain costs associated with the oversight and enforcement of the defendant's compliance with the order. The order also imposes the following civil penalties against the defendants: $750,000 as to Tri-State Industries, Inc.; $500,000 as to J. T. Einoder, Inc.; $500,000 as to John Einoder; and $50,000 as to Janice Einoder. The total civil penalty is $1.8 Million

People v. Blue Island Phenol LLC & JLM Chemicals Inc., 08-CH-34583 (Cook County)

On January 14, 2011, a Consent Order between the State and Blue Island Phenol (BIP) was entered by the Cook County Circuit Court. The case arose from an explosion, fire and off-site release incident that impacted the facility's phenol manufacturing unit. The Order required clean up of residual contamination, conduct of process hazard analyses on all of the facility (to prevent recurrence of similar incidents) and implementation of a fire protection system. A $250,000 penalty was assessed in the Order, but was reduced to a $100,000 penalty payment because the facility agreed to implement a $531,000 SEP, the installation of new carbon adsorption beds to improve the efficiency of a thermal oxidizer and reduce air emissions.

In 2012, there were 161 environmental matters referred to the Attorney General's Office, local States' Attorneys and United States Environmental Protection Agency and 161 orders were entered involving total penalties of $2,745,946 and SEPs of $97,875.

Significant Cases/2012

People v. Wedron Silica Corporation, 10-CH-172 (LaSalle County)

Wedron Silica Corporation ("Wedron") mines and processes approximately one million tons of high-grade silica sand that is used in various manufacturing processes at its LaSalle County, Illinois facility. Process wastewater and stormwater from the 100 acre site is collected and routed to various pits and holding basins on its site prior to discharge to local waterways, including the Fox River. Wedron experienced violations of the total suspended solids ("TSS") effluent discharge limit in its National Pollutant Discharge Elimination System ("NPDES") permit in the mid to late 2000's. These violations were caused by inadequate holding times in its holding basins to allow for solids settling and inadequate housekeeping around its processing facility that allowed spilled materials to enter the local waterways. Wedron reconfigured its process wastewater and stormwater collection and treatment system to allow more solids settling time prior to discharge and improved housekeeping around its facility to reduce materials being washed into local waterways. Pursuant to the July 17, 2012 Consent Order, the company paid a $32,000.00 civil penalty and performed a supplemental environmental project involving financial assistance to a local youth nature camp to restore native woodland areas at its facility, valued at $51,500.

People v. ExxonMobil Oil Corp., 08-CH-2348 (Will County)

On May 17, 2012, a Consent Order between the State and ExxonMobil (E-M) was entered by the Will County Circuit Court. The case arose from multiple, multi-media violations, the most significant of which involved: 1) recurrent seeps of petroleum to the DesPlaines

River from the Joliet refinery's barge loading facility; and 2) recurrent power outages, which resulted in excess air emissions when refinery gases had to be routed to flares that could not adequately destroy them. The Order reflects the fact that, by the time of entry, E-M had cleaned up historic contamination at the barge loading facility and taken actions to prevent future releases from loading operations. The Order also reflected the fact that, by the time of entry, E-M had retained an electrical engineering contractor to evaluate causes of power outages and implemented recommendations of the contractor to minimize such outages in the future (this included considerable work between E-M and Commonwealth Edison, its power supplier). E-M paid a $300,000 penalty to resolve this matter.

People v. W.R. Grace Co., 10-CH-45633 (Cook County)

On the evening of October 5, 2010, a chemical spill occurred at the facility resulting in a cloud of nitrous oxide and requiring evacuation of the facility. The release occurred when an incompatible product was added to a storage tank in the packaging operations. The Illinois EPA referred the matter to the IAGO the next day, October 6, 2010. The IAGO filed a complaint in the Circuit Court of Cook County on October 20, 2010 alleging that W.R. Grace's actions created a substantial danger to the environment and caused, threatened, or allowed air pollution in violation of Section 9(a) of the Act.

On October 21, 2010, an Agreed Preliminary Injunction and Order was entered requiring W.R. Grace to conduct a formal investigation of the release and to develop appropriate measures to prevent future releases. An investigation report was submitted to the State on December 20, 2010, and W.R. Grace agreed to implement corrective measures including posting of additional signage and warnings, the creation of new product labels, employee training, installation of unique fittings for dedicated pumps and hoses, and implementation of internal permitting and lock-out systems to ensure proper connection of pumps and hoses to product tanks. The remedial measures were implemented in February, 2011.

On June 20, 2011, a Final Agreed Order was entered. W.R. Grace committed to continue to maintain the previously implemented remedial measures and paid a civil penalty of $22,500.00.

People v. Roxanna Landfill, Inc., Midwest Sanitary Service, Inc., WRB Refining, LP, & ConocoPhillips Company, PCB 12-123

This case involved the owner and operator of a crude oil refinery, a non-hazardous special and municipal waste landfill, and a transporter of non-hazardous, special and hazardous wastes. On August 28, 2009, a driver for the transporter was directed to retrieve a vapor lid roll-off box of non-hazardous waste at the refinery. Although the description of the waste given to the driver was correct, the identification number of the roll-off box provided to the driver was incorrect. Neither the driver nor refinery personnel checked other records or the contents of the roll-off box to ensure that the correct roll-off box was being removed. The roll-off box was transported to the landfill and disposed. When the driver returned the empty roll-off box to the refinery, the mistake in the roll-off box numbers was discovered and it was determined that hazardous petroleum separation sludge had been delivered to the non-hazardous waste landfill. The parties acted quickly and responsibly, sending a hazardous waste contractor to recover the hazardous waste at the landfill before it was mixed with other wastes and then properly managing the hazardous waste until it could be disposed at a hazardous waste facility.

A complaint was filed with the Pollution Control Board and settlement agreements with the refinery and transporter were approved by the Board on June 7, 2012. The agreement with the refinery required it to pay a civil penalty of $14,500.00. The settlement agreement with the transporter imposed a civil penalty of $8000.00 and performance of a Supplemental Environmental Project requiring the transporter to provide $8000.00 in waste containers, hauling services, and disposal costs to facilitate State-directed waste cleanups at sites where responsible parties either no longer exist or lack the financial resources to complete a cleanup. The refinery and transporter

The Illinois Statehouse where laws are made

also implemented procedures to ensure paperwork and loads are checked so that events like the one here do not occur again.

The settlement agreement with the landfill was approved by the Board on December 6, 2012. It required the landfill to pay a $7000 civil penalty and perform a Supplemental Environmental Project valued at $7000 consisting of providing 200 tons of waste disposal for State directed cleanups. The landfill also made improvements to its load checking procedures.

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 2011-2012

New laws enacted by the Illinois General Assembly and signed by Governor Pat Quinn included a major new measure for permit streamlining by the Illinois EPA, a phaseout and additional safeguards on the use of perchloroethylene by drycleaners, legislation impacting Illinois EPA compliance and enforcement processes, Environmental Justice, landfills, electronic waste, Environmental Justice, alternate fuels, illegal tire disposal, vehicle emission testing and others.

Permit Streamlining

Public Act (P.A.) 97-95/House Bill (HB) 1297. *Signed into law on July 12, 2011; effective July 12, 2011 (January 1, 2012 for the air permit fee increases only).* Amends the Environmental Protection Act (EPAct). Provides for Illinois EPA permit streamlining by requiring the Agency to develop online permit applications, and by authorizing general permitting, permitting by rule, and a process for the expedited review of permits. Authorizes the Agency to establish a Registration of Smaller Sources (ROSS) program for smaller sources of air pollution. The ROSS program would replace the more onerous permitting process for a large number of small emissions sources.

P.A. 97-1081/Senate Bill (SB) 2867. *Signed into law on August 24, 2012; effective August 24, 2012.* Creates a streamlined process for the Illinois EPA's issuance of its annual special waste hauler permits by extending the duration of the permits from one year to three years. Makes a corresponding increase in the associated annual permit fees by threefold in order to make this provision revenue neutral. Specifically, the current annual special waste hauling permit application fee (which would cover all of a person's or company's vehicles) would increase from $250 for one year to $750 for three years, and the current special waste hauling per vehicle permit fee would increase from $20 per vehicle for one year to $60 per vehicle for three years.

Imposition of Permit Fees on Concentrated Animal Feeding Operations (CAFOs)

P.A. 97-962/HB 5642. *Signed into law on August 15, 2012; effective August 15, 2012.* Amends the Environmental Protection Act (EPAct). Establishes new annual National Pollutant Discharge Elimination System (NPDES) permit fees for Concentrated Animal Feeding Operations (CAFOs) that are required to obtain a permit from the Illinois EPA. The fees are $750 per year for large CAFOs, $350 per year for medium-sized CAFOs, and $150 per year for small CAFOs. P.A. 97-962 does not impose any fees on livestock feeding operations that are not required to get an NPDES permit.

Phase-Out of Perc at Drycleaning Facilities

P.A. 97-1057/HB 4526. *Signed into law on August 24, 2012; effective August 24, 2012.* Amends the Environmental Protection Act (EPAct). Beginning January 1, 2013, requires drycleaning machines that use perchloroethylene ("perc") to have both primary and secondary control systems. However, existing perc dry cleaning machines with only primary control systems could continue to be used in their current location until the end of their useful life. (Drycleaners currently using machines with secondary control systems would not be affected.)

Beginning January 1, 2014, requires persons properly trained in drycleaning best management practices to be present at drycleaning facilities whenever any drycleaning machines are operated. Requires secondary containment measures for drycleaning machines (thus, mirroring the secondary containment requirements of the Drycleaner Environmental Response Trust Fund Act). Clarifies that drycleaners that do not use perc are not required to undergoing the training required under the bill

Requires that, upon renewing a license each year with the Drycleaner Environmental Response Trust Fund Commission, a drycleaner must certify to the Commission that he/she is storing and transporting all hazardous waste (including perc) in accordance with all State and federal laws and regulations. Also requires drycleaners to annually provide the Commission with copies of all hazardous waste manifests upon renewing their licenses.

No later than January 1, 2016, requires the Illinois EPA to submit a report to the Illinois General Assembly on the impact on groundwater from releases of perc. The report may include recommendations for reducing or eliminating impacts to groundwater from future releases of perc.

Prohibition on New Landfills in Cook County

P.A. 97-843/HB 3881. *Signed into law on July 23, 2012; effective July 23, 2012.* Amends the Environmental Protection Act (EPAct). Prohibits the construction of any new landfills or the expansion of any existing landfills anywhere in Cook County (including anywhere in the City of Chicago). This bill would codify in state statute a current long-standing City ordinance banning any new or expanded landfills within the City's borders, as well as extend the moratorium to all of Cook County.

Phase-Out of Plastic Additive BPA in Children's Food & Beverage Containers

P.A. 97-1101/SB 2950. *Signed into law on August 27, 2012; effective August 27, 2012.* Creates the Toxin-Free Toddler Act. Beginning January 1, 2013, prohibits manufacturers and wholesalers from selling or offering to sell in Illinois any children's food or beverage containers that contain bisphenol A (BPA). Beginning January 1, 2014, prohibits retailers from knowingly selling or offering to sell in Illinois any children's food containers that contain BPA. Does not apply to the sale of any used children's food or beverage containers. Provides for enforcement by the Attorney General. Authorizes the imposition of a $200 civil penalty for violations of the bill. Provides that the bill be repealed should the federal Food and Drug Administration (FDA) promulgate a final rule prohibiting polycarbonate resins (BPA) in infant feeding bottles and spill-proof cups (sippy cups).

E-Waste Expansion Bill

P.A. 97-287/SB 2106. *Signed into law on August 10, 2011; effective August 10, 2011.* Amends the Electronic Products Recycling and Reuse Act (E-Waste Act). Significantly increases the covered scope of products covered under the E-Waste Act to include keyboards, mice, digital music payers, video game consoles, small-scale servers, cable and satellite boxes, and VCRs. Eliminates the "return share" calculation for determining recycling goals for computer, monitor, and printer manufacturers and replaces it by requiring all manufacturers to recycle, by weight, a percentage of their total retail sales (40% for 2012). Requires the Illinois EPA to issue grants to county recycling coordinators for the purpose of informing

residents about the E-Waste Act. Authorizes the Agency to issue administrative citations (ACs) for violations of the E-Waste Act.

Changes the definition of underserved counties. Adds additional criteria for manufacturers of electronic products to adjust their total weight of electronic products recycled. Changes the dates by which manufacturer and collector reports are due. Reduces the registration fees for certain manufacturers.

Creation of the Environmental Justice (EJ) Act

P.A. 97-391/SB 2193. *Signed into law on August 16, 2011; effective August 16, 2011.* Creates the Environmental Justice (EJ) Act. Creates a Commission on Environmental Justice. Charges the Commission with the following duties:

1. advising state entities on EJ issues;
2. reviewing the impact of state law and policies on EJ and sustainable community issues;
3. assessing the adequacy of state and local laws to address EJ and sustainability issues;
4. developing criteria to assess whether communities may have EJ issues; and
5. recommending options to the Governor for addressing issues, concerns, or problems related to EJ including prioritizing areas of the State that need immediate attention.

Requires the Commission to submit an annual report to the Governor and General Assembly every year beginning on or before October 1, 2011. Requires the Illinois EPA to provide administrative and other support to the Commission.

Expansion of Alternate Fuels Rebate Program to Cover Car-Sharing Programs

P.A. 97-90/HB 2903. *Signed into law on July 11, 2011; effective July 11, 2011.* Amends the Alternate Fuels Act. Authorizes the Illinois EPA to provide a grant from the Agency's Alternate Fuels Rebate Program through FY2013 (potentially partially in FY2011 as well as in FY2012 and FY2013) to any car-sharing program in Illinois. This bill would not only allow the I-GO non-profit car-sharing program in the Chicago area to request a grant, but also the Zip-Car (for-profit) car-sharing program currently in business in Champaign and in Chicago, as well as any other car-sharing program in the State. Also caps the amount of the grant at 25% (previously 100%) of the total project costs for the purchase of electric vehicles and recharging infrastructure, not to exceed the amount available in the Alternate Fuels Fund. The Agency would have the discretion of providing such grants for car-sharing programs that submit a grant proposal by June 30, the end of the State's fiscal year. After June 30, the Agency would be required to review the amount of funds in the Alternate Fuels Fund and would have the discretion to provide up-front grants to one or more car-sharing programs not to exceed the amount remaining in the fund.

Pharmaceutical Collection Act Bills

P.A. 97-545/HB 2056. *Signed into law on August 24, 2011; effective January 1, 2012.* Amends the State Finance Act to create the Household Pharmaceutical Disposal Fund as a special fund in the State treasury. Also amends the Environmental Protection Act (EPAct) to exclude from the definition of "pollution control facility" the portion of a site or facility used to incinerate only pharmaceuticals from residential sources that are in the possession or control of a law enforcement agency. Authorizes any law enforcement agency to collect pharmaceuticals from residential sources, and to incinerate the collected pharmaceuticals in a manner that is consistent with rules adopted by the Illinois EPA. Authorizes the Illinois Criminal Justice Information Authority to use moneys in the Household Pharmaceutical Disposal Fund to make grants to local law enforcement agencies for the purpose of facilitating the collection and incineration of pharmaceuticals from residential sources. Requires a $20 assessment to be levied against persons who commit specified drug offenses.

P.A. 97-546/HB 3090. *Signed into law on August 24, 2011; effective January 1, 2012.* Amends the Safe Pharmaceutical Disposal Act. Authorizes any city, village, or municipality to allow the use of its city hall or police department to display a container suitable for use as a receptacle for used, expired, or unwanted pharmaceuticals. Provides that the used, expired, or unwanted pharmaceuticals may include unused medication and prescription drugs. Provides that the receptacle may only permit the deposit of items, and requires the contents to be locked and secured. Requires the container to be accessible to the public and to be posted with clearly legible signage indicating that expired or unwanted prescription drugs may be disposed of in the receptacle.

Prohibition on Zinc-Air Button Cell Batteries

P.A. 97-1107/HB 1261. *Signed into law on August 27, 2012; effective July 1, 2013.* Amends the Mercury-Added Product Prohibition Act. Effective July 1, 2013, adds zinc-air button cell batteries to the list of consumer and commercial products that cannot be sold or distributed in the State, if mercury is intentionally added during manufacture of the product.

Rewrite of Illinois EPA Compliance Commitment Agreement Process

P.A. 97-519/SB 1357. *Signed into law on August 23, 2011; effective August 23, 2011.* Amends the Environmental Protection Act (EPAct). Authorizes the Illinois EPA and any violator of the EPAct, Pollution Control Board rules, or permit conditions, to voluntarily enter into a Compliance Commitment Agreement (CCA), the terms of which would then be enforceable if the violator fails to comply with the CCA. Clarifies that an alleged violator must submit proposed terms for a CCA in response to an alleged violation only if the alleged violator desires to enter into a CCA. Requires the Attorney General, when determining whether to file a complaint based on violations that were the subject of a CCA, to take into account successful completion of a CCA (or an amended CCA) and weigh the successful completion in favor of the person completing the CCA. Adds successful completion of a CCA to the factors the Pollution Control Board may consider when determining civil enforcement penalties. Clarifies that the Illinois EPA can refer violations of CCAs for enforcement. Provides a civil penalty of $3,000 for violations of CCAs.

Stiffer Penalties for Illegal Large-Scale Tire Disposal

P.A. 97-286/HB 2001. *Signed into law on August 10, 2011; effective August 10, 2011.* Amends the Environmental Protection Act (EPAct). Provides that it is a Class 4 felony for any person to knowingly openly dump more than 250 cubic feet of waste or more than 50 waste tires. Currently, a first violation is a Class A misdemeanor regardless of the quantity of waste or number of tires dumped. Also increases from $5,000 to $25,000 the felony penalty for open dumping to make it consistent with the felony penalty for the knowing unpermitted storage, treatment, or disposal of more than 250 cubic feet of waste.

Modernization of Illinois EPA's Vehicle Emissions Testing Program

P.A. 97-106/HB 1093. *Signed into law on July 14, 2011; effective February 1, 2012.* Amends the Vehicle Emissions Inspection (VEI) Law of 2005 (within the Illinois Vehicle Code). Eliminates the requirement for steady-state idle exhaust gas analysis (idle exhaust) and evaporative system integrity testing (gas cap) in Illinois. These test types are primarily used for pre-2007 model year heavy-duty vehicles not equipped with on-board diagnostic (OBD) technology.

Also adds a fallback visual inspection test for certain vehicles that are equipped with OBD technology, but for which OBD testing is not possible due to the vehicle's design. Changes the definition of "malfunction indicator lamp" to include the abbreviation, "MIL." Changes the definition of "OBD system." In addition to

1996 and newer light-duty vehicles and trucks, certain heavy-duty vehicles are required to be equipped with OBD technology.

Adds exemptions from the vehicle inspection requirement for 2006 and older vehicles with a gross vehicle weight rating (GVWR) between 8501 and 14,000 pounds and vehicles with a GVWR greater than 14,000 pounds. These heavy-duty vehicles are not all required to be equipped with OBD technology; and, therefore, can only be tested with the idle exhaust and gas cap tests.

Clarifies that persons whose vehicles are registered in Illinois testing areas (such as the Chicago metropolitan or Bi-State Metro East areas), but primarily operate their vehicles outside of the Illinois testing areas and in areas that does not require emissions testing are entitled to an annual exemption from the emissions testing requirement. This was the original intent of this exemption. However, the current wording of this exemption results in an unintended loophole that would provide the annual exemption for a vehicle that is primarily operated outside the Illinois testing areas but does operate within an area that requires emission testing. If the vehicle is registered in an Illinois testing area and is primarily operated outside of the Illinois testing areas, but in an area that requires emissions testing, it still must be tested. Therefore, this change would clarify the original intent and close the unintended loophole. This change accomplishes this clarification by using the term "and" instead of "or."

Rulemaking Procedure for Federal Air Pollution Standards

P.A. 97-945/SB 3672. *Signed into law on August 10, 2012; effective August 10, 2012.* Amends the Environmental Protection Act (EPAct) and the Illinois Administrative Procedure Act (IAPAct). Authorizes the Illinois EPA to adopt identical-in-substance air emission rules. "Identical in substance" rules are state regulations that require the same actions with respect to protection of the environment, by the same group of affected persons, as would federal regulations if the USEPA administered the program in Illinois. It is important to note, however, that under Section 7.2(a)(6) of the Illinois EPAct, wherever appropriate, the Board regulations must reflect any consistent, more stringent regulations adopted pursuant to the rulemaking requirements of EPAct and Section 5-35 of the Illinois Administrative Procedure Act. In adopting such regulations that are "identical in substance" with specified federal regulations, the Board would be required to complete its rulemaking proceedings within one year after the adoption of the corresponding federal rule. The one-year period could be extended by the Board for an additional period of time if necessary to complete the rulemaking proceeding.

New Waste Disposal & Recycling Task Force Created

P.A. 97-853/HB 4986. *Signed into law on July 26, 2012; effective January 1, 2013.* Amends the Illinois Solid Waste Management Act. Creates the Solid Waste Reduction and Management Task Force to provide suggestions for more efficient and effective collection, processing, and management of recyclable, reusable, and compostable materials that are currently disposed of as solid waste, in a manner that promotes economic development, protects environmental and public health and safety, and allows the most practical and beneficial use of those materials. Provides that the Task Force be co-chaired by the Department of Commerce and Economic Opportunity (DCEO) and the Illinois EPA. Requires the Task Force to submit its recommendations to the Illinois General Assembly no later than two years after the effective date of the bill.

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