

# The RT Review

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**RT ENVIRONMENTAL SERVICES  
NUMBER ONE IN PENNSYLVANIA FOR  
COMPLETION OF BROWNFIELDS  
LAND RECYCLING PROJECTS**

**PRESS RELEASE**

KING OF PRUSSIA (October 4, 2004) - RT Environmental Services, a full-service environmental consulting firm in King of Prussia, PA, announced today that it has received more final site approvals than any other consulting firm in 2003-2004 from the Pennsylvania Department of Environmental Protection (DEP) under the state's Land Recycling (brownfields remediation) Program.

The DEP recently released its "Final Report - Consultant List" in order to "...give credit to professionals that successfully complete the Act 2 process." Act 2 of 1995 is Pennsylvania's Land Recycling and Environmental Remediation Standards Act, better known as the Act 2.

RT, founded in 1988 by Gary R. Brown, P.E., tops the final report list with 32 final report approvals in 2003-2004, more than twice the number of any other consultant during that reporting period. "We are extremely proud of that record of achievement and leadership," said Brown, who is RT Environmental's president.

We are also grateful to the many clients who have given RT the opportunity to return brownfields sites to productive reuse and help put Pennsylvanians back to work."

RT has completed projects in five of DEP's six regions since the inception of the state's brownfields program, and completed projects in three regions during the 2003-2004 reporting period. New uses of former brownfields that RT has successfully restored to productive functions include offices, warehouses, a brewing facility, residential areas, parks, light industrial enterprises and a variety of small businesses.

RT provides reuse plans, PCB remediation, risk assessment, capping and paving, bioremediation and natural attenuation as part of its brownfields/land recycling services.

"Our record of successful project completions is testimony to the collective expertise and commitment of our RT team members," Brown said, noting that 11 RT team members have project completions to their credit. Chris Orzechowski, P.G. alone has managed more than a dozen brownfields projects, Brown added.

In addition to its land recycling services, RT Environmental performs environmental surveys, indoor air quality services, a variety of environmental remediation services, landfill services, air emissions, processing facilities and concept through start-up services.

## BROWNFIELDS SITE RESIDENTIAL UPGRADES IN PA - ALL THE RAGE!

In the last few weeks and months, upgrading of cleanup liability protection (CLP) at Brownfields sites, particularly in Pennsylvania, has taken off at Brownfield sites. Pennsylvania's Award Winning Act 2 Land Recycling Program, unlike most state's Brownfield programs, has a regulation which describes what a redeveloper needs to do to change from future non-residential use to residential use. Given the expanded economic and regulatory hurdles associated with conventional "sprawl" development, it is now clear that the hundreds of Brownfields sites throughout the region, which are ready for redevelopment may now be put to a higher and better use.

Economic incentives put in place under the Rendell Administration, and implemented through the Pennsylvania Department of Environmental Protection by Secretary Katie McGinty have provided economic incentives, and, built upon the original fundamentals of the Act 2 of 1995 Land Recycling Program. Many residential development firms are now actively seeking out Brownfield sites, many of which are in Pennsylvania riverfront locations with existing infrastructure, which is unquestionably "smart" growth.

RT is already investigating or evaluating Brownfield sites for CLP residential upgrade, in Chester, Lansdale, Lower Merion, and Royersford. For more sites, all in Pennsylvania, are considering the option. According to Gary Brown, President of RT Environmental Services, Pennsylvania's Act 2 Land Recycling Program is very "user friendly" because it allows the use of "pathway elimination" using engineering controls including vapor barriers and caps, and institutional controls such as deed acknowledgments, which help facilitate well understood and effective solutions to facilitate redevelopment when contaminants are present at sites. Unlike most other states, Pennsylvania DEP has very clear criteria and flexible statewide health standards that help environmental consultants deter-

mine what type of remediation is necessary at each site, without waiting for extended regulatory decision making. Residential developers and redevelopers have always preferred sites that can be built out quickly because extended construction regulatory review periods cause increases in housing prices due to the construction phase carrying cost of the project. Most municipalities, on the other hand, are very cooperative when it comes to Brownfields site redevelopment, because getting rid of a blighted site and creating a new neighborhood without any sprawl very simply, improves the community.

For a number of years, some of the hardest sites to redevelop were those Brownfield sites which were too small to attract major developers and redevelopers, but with the "residential upgrade" being readily available and usable at many Brownfields sites, small to medium infill residential development has made these sites quiet attractive.

We at RT are proud to be a part of this important new trend, which is clearly accelerating the redevelopment of Brownfield sites. At our next spring environmental update seminar, held jointly with the Montgomery County Industrial Development Corporation, Tri-State Commercial Realtors Alliance, and Manko Gold Katcher and Fox, we will be focusing on how the "residential upgrade" works, and is being applied at sites throughout the region. Should you need any information on the Brownfields CLP "residential upgrade", call either Christopher Orzechowski, P.G., or Gary R. Brown, P.E. at 610-265-1510.

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## PROPERTY MANAGERS ARE MORE SMARTLY MANAGING BUILDING ENVIRONMENTAL ISSUES

By: Gary Brown and Paul Ledebur

In the last two years, property managers, as well as building engineers and maintenance managers have gotten much smarter at managing mold, asbestos and lead paint issues. Most leading property management companies now have standard protocols which include:

- Mold awareness training for property managers, building engineers and maintenance supervisors.
- Standard forms for recording indoor quality (IAQ) complaints.
- Baseline IAQ monitoring programs.

In addition, many leases now include information for tenants (both residential and commercial) on how to maintain conditions to inhibit mold growth, and the importance of reporting, if mold occurs. In older buildings, most maintenance personnel now have asbestos containing material (ACM) awareness training, and a written ACM Operation and Maintenance Plan, as required by OSHA regulation, which is available and in effect.

In older residential multi family units, most facilities also have a written plan for the Operation and Maintenance of lead based paint surfaces on the premises.

Property managers have learned that managing environmental issues in buildings is neither overly costly nor time consuming. This is true when property management, building engineering, and maintenance personnel are trained, and know how distinguish minor issues from those which are more problematic, or which could become a cause of complaints or potential litigation among in multi-tenant situations.

For mold, many maintenance managers now have purchased their own moisture meters. This

allows them the capability to distinguish minor surface mold growth from mold that is caused by more extensive subsurface moisture penetration. These leakage/moisture intrusion problems often require professional assistance and/or building envelope repairs.

No one can afford to, nor should they call, outside consultants for every single building environmental problem which arises. However, smart property managers have made sure that their key staff can distinguish minor issues from those which require expert assistance. These property managers now make awareness training sessions a key part of their routine training program for their engineering and maintenance staff.

We at RT are proud to have already trained 500 property management, building engineering, and maintenance staff in mold awareness. Most seminar participants are members of leading trade organizations including AAGP, BOMA, and Tri-State Commercial Realtors Alliance. Based on past experience, the winter months are the best time for training, as there are fewer "outside" duties for key staff. Accordingly, we will be announcing RT's annual mold, ACM and LBP awareness training seminar program, so watch for our training schedule announcement, which will be sent out to AAGP, BOMA, and Tri-State members.

For further information, you can also visit our webpage at [www.rtenv.com](http://www.rtenv.com) for a more detailed training syllabus for each training session - ACM, LBP, and Mold. You can also contact Paul Ledebur, Manager or RT's Building Services Group at 610-265-1510, extension 11 should you have any questions or require additional information.

## MARYLAND RULES AIM TO KEEP MTBE OUT OF WELL WATER

The Maryland Department of the Environment (MDE), has drafted new rules to prevent MTBE and other petroleum products from reaching groundwater supplies in certain parts of the state. The rules require installation of double-walled pipes on all regulated motor fuel underground storage systems and require built-in sensors to warn of leaks.

"For Maryland families that rely on wells," said Governor Robert Ehrlich. "These new measures will provide additional assurance that their water supplies are clean and safe from MTBE and other petroleum products. These are tough, but necessary regulations to strengthen our environmental laws."

The MDE says the chemical, an oxygenate added to make gas burn more cleanly, improves Maryland's air quality and keeps gas prices affordable.

But the chemical is water soluble and gives drinking water an unpleasant taste and smell at

low levels and at higher levels may have adverse health effects, although it has not been classed as carcinogenic. "There is no evidence that MTBE causes cancer in humans," the Center for Disease Control states.

Maryland's emergency regulations will require increased groundwater sampling, mandate regular testing of tanks and fittings, and define steps that gas station owners and others must take when underground storage systems are suspected of contaminating groundwater.

The regulations will apply in areas where wells are the primary source of household drinking water and local geology makes it impractical for homeowners to find a new water source. The MDE will identify the areas and notify affected tank farm operators. The regulatory review committee of the General Assembly must review and approve the proposed emergency regulations before they can become effective. They could take effect as soon as October.

(Environment News Service - 8/27/04)

## RT STAFF AND PROJECT NEWS

As of late October, RT's financial projections were that this would be the second year in a row for record sales and revenue for RT Environmental Services. As always, we appreciate the continued opportunities our clients provide us. We are seeing greatly increased demand for Brownfields work, in New Jersey and Pennsylvania, our prime service areas.

We are expanding both of our key offices, as well as adding staff, to meet our clients needs.

Roy G. Bowman joins RT's New Jersey Office and adds to our training capabilities in asbestos containing materials, lead, hazardous materials, confined space entry, PCBs, and indoor air quality. Mr. Bowman has experience in the private sector, having directed all environmental health and safety activities for a major communications company.

Scott Hazelton joins RT's King of Prussia Office as Environmental Scientist. Mr. Hazelton is already completing soil and groundwater investigation work at a number of Act 2 sites.

Irene Valentine joins RT's New Jersey Office as Receptionist. Due to increased responsibilities for Jennifer Kilborn, RT has expanded its administrative staff so that our key functions in New Jersey are properly supported.

Gary Brown served as moderator for the Pennsylvania Chamber of Business Industry in-depth environmental

seminars, held in Valley Forge, Harrisburg, and Pittsburgh, in October. Many of the seminar attendees requested an extended schedule for next year's program.

Paul Ledebur is working on indoor air quality work for a large regional property management firm. Initial work includes several projects to address known mold concerns will also prepare portfolio wide procedures for managing air quality issues, and conduct training for key maintenance, property management, and engineering staff as well.

Gary Brown prepared an article on the new EPA "All Appropriate Inquiry" proposed regulations, which appeared in the Pennsylvania/New Jersey Real Estate Journal.

Advance work is also beginning by Kathleen O'Connor, RT's Marketing Specialist, for our spring Environmental Update Seminar held with the Montgomery County Industrial Development Corporation, and Tri-State Commercial Realtors Alliance. Topics will include the EPA "All Appropriate Inquiry" regulations, and, strong recent attention to residential upgrade Brownfields options under the Act 2 Program.

As always, we appreciate the opportunity our clients give us to be of service, and appreciate your strong support over the last year.

### RT'S CURRENT PROJECTS

- |                       |                                      |
|-----------------------|--------------------------------------|
| • Attleboro, MA       | Brownfields Site Redevelopment       |
| • Stratford, CT       | Redevelopment Feasibility Study      |
| • Haddonfield, NJ     | Petroleum Release Expert Report      |
| • Phillipsburg, NJ    | Brownfields Site Redevelopment       |
| • Southern NJ         | Landfill Site Redevelopment          |
| • Clearfield, PA      | Fill Management                      |
| • Chester, PA         | ACM Survey - Predemolition Abatement |
| • Newark, NJ          | Demolition Materials Management      |
| • Philadelphia, PA    | Phase 1 ESA - Former Smelter         |
| • Odenton, MD         | Phase 1 & 2 ESA - Laminates Site     |
| • Spring City, PA     | Phase 1 ESA - Former Foundry         |
| • Camden, NJ          | Tank Testing                         |
| • W. Springfield, MA  | PCE Remediation                      |
| • King of Prussia, PA | Superfund Remediation                |

## PA UPDATES

### DEP REVISES NOTICE OF INTENT/ APPLICATION FORM FOR NPDES CONSTRUCTION STORMWATER PERMIT

The Department of Environmental Protection has revised the Notice of Intent/Application for coverage under a General or Individual NPDES Permit for Stormwater Discharges Associated With Construction Activities (NOI/Application). The revisions are primarily in response to the environmental issues posed by problematic geology, soils, waste or fill materials that may be present during construction activities, similar to those encountered during the construction of Interstate 99. In addition, other revisions were necessary to reflect new Department guidance and policies and to facilitate the Department's data collection and monitoring needs. This revised NOI/Application, document number 3930-PM-WM0035 Rev. 8/2004, replaces all previous versions of the NOI/Application and can be obtained from DEP Regional Offices, County Conservation District Offices and on the DEP website.

*(DEP Update - 8/20/04)*

### SMALL BUSINESSES CAN APPLY FOR MATCHING GRANT PROGRAM

A new grant program available through the Pennsylvania Department of Environmental Protection offers small businesses financial assistance to help purchase environmentally-friendly equipment. The Small Business Advantage Grant Program provides 50 percent matching grants up to a maximum of \$7,500 to purchase energy-efficient or pollution prevention equipment. The grants are designed to help small businesses cut costs and protect the environment. For more information, visit [www.dep.state.pa.us](http://www.dep.state.pa.us), and use the keyword "small business."

*(The Friday File - 8/20/04)*

### PROPOSED LAB ACCREDITATION MOVES IN PA

The Environmental Laboratory Accreditation proposed rule making was approved by the Environmental Quality Board at the August 17 meeting. This regulation proposes an environmental laboratory accreditation program for laboratories that test or analyze samples and implements the Environmental Laboratories Programs Act. The regulation established the scope of accreditation, application procedures, fees,

and standards for accreditation- including personnel requirements, essential quality control procedures, proficiency test studies, on-site assessments, record keeping, reporting, and notification requirements. A 30-day comment period will open upon publication of the proposed rulemaking in the Pennsylvania Bulletin. That publication was anticipated in October.

*(PA Chamber of Business & Industry)*

### FOUR STATES SIGN 30 YEAR DELAWARE RIVER BASIN PLAN

Elected and environmental leaders from Delaware, New Jersey, New York, Pennsylvania, and the federal government, along with other watershed stakeholders, are celebrating the completion of the 30 year Water Resources Plan for the Delaware River Basin.

The signing ceremony in September at Dravo Plaza on Wilmington's Christina Riverfront launched a three day conference in Wilmington on implementation of the plan. The basin plan emphasizes integration and collaboration and is not prescriptive or regulatory.

The 13,539 square mile Delaware River Basin drains portions of the four states. Nearly 15 million people-some five percent of the nation's population- rely on the waters of the basin for drinking and industrial use.

The goal-based plan to guide policy and action includes five desired results:

An adequate and reliable supply of suitable quality water to sustain human and ecological needs through 2030

Managing the system of waterway corridors to reduce flood losses, improve recreational experiences, and protect, conserve, and restore riparian and aquatic ecosystems

Integrating water resource management considerations into land use planning and growth management while recognizing the social and economic needs of communities

Strengthening partnerships for the management of water resources among all levels of government, the private sector and individuals sharing an interest in sustainable water resources management

Providing opportunities to enhance appreciation and commitment to the protection, improvement, and restoration of the basin's water resources

The plan opens with a set of 12 guiding principles against which all policy decisions and actions affecting water resource management should be measured.

It suggests a set of goals and objectives

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with milestones and indicators to measure progress towards achieving the plan's desired results.

RT congratulates Carol Collier, DRBC Executive Director, on achieving this important goal.

*(Environment News Service 9/16/04)*

### PENNSYLVANIA DOUBLES CLEAN ELECTRICITY BUY TO 10 PERCENT

Pennsylvania has doubled its purchase of electricity from cleaner sources to 10 percent, Environmental Protection Secretary Kathleen McGinty said in mid-October. She announces the 10 percent purchase at PennFuture's fifth annual GreenPower: Turn It On! awards ceremony.

The Department of Environmental Protection received the PennFuture award for a 100 percent green energy purchase that cut energy costs by about 35 percent at the new Southeast Regional Office, which opened earlier this year.

Under four year contracts with Community Energy Inc. And Strategic Energy LLC, the state will purchase 100,000 megawatt hours a year, or 10 percent of the state government's electricity needs, from sources such as wind, waste coal and hydroelectric energy, at a rate of 0.34 cents per kilowatt hour.

Thirty-five percent of this purchase will come from new wind sources and 10 percent from burning waste coal in circulating fluidized bed facilities, which produces lower air emissions than conventional coal plants.

The remainder will come from low impact run-of-river hydroelectric power from Susquehanna River, McGinty said.

The new purchase more than triples the amount of wind certificates purchased in the state.

McGinty said the coal power purchase helps to clean up a major source of water pollution and reclaims otherwise useless land through the purchase of waste coal certificates.

The action embraces one of the main environmental themes of the administration of Governor Ed Rendell, a Democrat- viewing environmentally harmful material as a potential resource that can be re-used rather than remain as a liability, McGinty said.

*(Environment News Service - 10/19/2004)*

## TECHNOLOGY UPDATES

### GREEN WEAPON SLAYS TERMITES

A U.S. Forest Service researcher looking for ways to prevent fungi from causing wood to decay may have discovered an important new tool in the battle against termites. Microbiologist Frederick Green III discovered that a commercially available naphtha based compound called N-hydroxynaphthylamide (NHA) worked well to prevent decay causing fungi from damaging wood and was effective at killing common Eastern subterranean termites.

Green reported his findings to two termite experts, entomologists M. Guadalupe Rojas and Juan Morales-Ramos, at the USDA's Agricultural Research Station in New Orleans.

Termites cause an estimated \$2 billion in damage annually in the United States and are a major problem in the warm and humid Southeast, where Formosan subterranean termites (FSTs) have proven to be especially destructive and difficult to eradicate. This type of termite is an invasive species that arrived in the U.S. about 50 years ago and are responsible for an estimated \$1 billion in damage annually to buildings and living trees. FSTs are large and reproduce prolifically, establishing colonies that number 10 million or more termites— compared to only 300,000 individuals in a typical colony of native Eastern subterranean termites.

Termites sometimes travel as far as 100 yards from their nests in search of food and can eat through plastic pipe and thin metal.

Rojas and Morales-Ramos developed a cellulose attractant to combine with the NHA. It proved so appealing to the termites that even the Formosan subterranean termites would carry the bait containing NHA back to their nests. In field tests in Louisiana and Mississippi, entire colonies of Formosan subterranean termites were eliminated in a matter of months, depending on the size of the colony.

Because the NHA termite bait is effective at low doses and, unlike most termiticides, contains no heavy metals, it is considered environmentally friendly and cost effective.

Earlier this year, the U.S. Patent Office issued a patent for the compound, with Rojas, Morales-Ramos and Green are all listed as the inventors, and the U.S. Department of Agriculture has awarded an exclusive license for developing, manufacturing and marketing products based on the technology.

*(Environment News Service - 8/4/04)*

### RIVERBANK SOILS FILTER CONTAMINANTS FROM DRINKING WATER

Contaminants may foul drinking water drawn directly from a river, but John Hopkins researchers have found that the soil alongside a river can remove microbes and organic material as water flows through it. The cleaner water is then pumped to the surface through wells drilled a short distance from the river.

This technique, called riverbank filtration, has been used in Europe for more than 50 years to improve the taste and smell of drinking water and to remove industrial solvents.

Now, John Hopkins researchers have found that passing river water through nearby sediment can produce other health benefits and may cut water treatment costs.

The researchers have been studying water drawn from commercial wells located beside the Wabash, Ohio and Missouri rivers near Terre Haute, Indiana; Louisville, Kentucky; and Kansas City, Missouri.

Josh Weiss, a doctoral student in the university's Department of Geography and Environmental Engineering, presented the team's research results in August in Philadelphia at the national meeting of the American Chemical Society.

Riverbank filtration appears to decrease the level of bacteria and viruses, he said. Water analyses also showed encouraging, though not definitive, signs that this technique can curtail Giardia and Cryptosporidium, two waterborne microorganisms that cause serious digestive ailments.

Weiss said, "It sounds counter-intuitive to drill wells nearby when water can be taken directly from a river. But our research indicates that riverbank filtration can naturally remove pathogens and organic material that can cause health problems, including some microbes that are able to survive conventional disinfection systems."

*(Environment News Service - 8/26/04)*

### 35 MILLION YEAR OLD METEOR STRIKE DECODED

A meteorite that hit Chesapeake Bay some 35 million years ago caused an explosion bigger than the eruption of Mt. St. Helens, and sent matter flying as far as Georgia, researchers at the University of Georgia believe.

People in Georgia's Dodge and Bleckley counties have picked up small pieces of natural glass called Georgiites for years- mysterious small, translucent green or brown

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objects, but no one could explain their origin.

Now researchers at the University of Georgia, studying a kaolin mine in Warren County, have found a layer of tiny grains, which indicate that the grains and the Georgiites were products of a recently discovered impact that left a huge crater beneath the waters of the Chesapeake Bay.

Some 1,700 of these objects have been found in Georgia to date, and potassium-argon geochronology has dated them to around 35 million years of age.

The impact in the Chesapeake Bay caused a huge amount of material, both from the Earth and the asteroid to become airborne, researchers believe, and the 25 feet deep layer of tektites in the kaolin mine was probably laid down by the event.

The research was published in the August issue of the journal "Geology."

*(Environment News Service - 8/24/04)*

### GLOBAL WARMING FORECAST TO HIT CALIFORNIA HARD

Global warming will bring California a dramatic increase in extreme heat and heat-related mortality and significant reductions in Sierra snowpack, with cascading impacts in water supply, according to a new study by 19 scientists.

The study finds the severity of climate change impacts on California will depend on the amount of future greenhouse gas emissions from fossil fuel combustion and other human activities.

"These new predictions illustrate more than ever the urgent need to control greenhouse gas emissions now," said study co-author W. Michael Hanemann, professor of agricultural and resource economics and director of the California Climate Change Center at the University of California at Berkeley. "Because of lags in the natural system, what we do today will affect climate 30 years from now."

The findings were published in August in the journal "Proceeding of the National Academy of Sciences."

The researchers chose to focus on California because of its diverse climate and limited water supply.

One scenario assumes a business as usual approach to the use of fossil fuels, while the

## TECHNOLOGY UPDATES *(Continued)*

other factors in lower emissions when switching to alternative energy and more fuel efficient technology.

Under the study's lower emissions scenario, summer temperatures in California will rise four to five degrees Fahrenheit by the end of the century, with the length of the heat wave season extending from an average of 115 days in a year to 149 to 162 days.

Those figures are several degrees higher than previous models has predicted, particularly in the summer months. The rise on temperature corresponds to a projected increase in heat-related mortality in Los Angeles, according to the study.

The region now averages 165 heat-related deaths per year, but that would increase two to three fold if emissions are controlled, or a stunning five to seven fold if emissions are left unchecked.

The researchers also find that hotter weather triggers reductions in the Sierra Nevada Mountains snowpack, which feeds into California's streams and reservoirs.

By mid-century, the snowpack decline translates into a loss of 2.6 to 4 million acre-foot of water storage. By the end of the century, the snowpack could decline as much as 30 to 90 percent, depending upon whether emissions are controlled, the study finds.

*(Environment News Service - 8/18/04)*

### NEW FEDERAL PUBLICATIONS

Clarifying Cleanup Goals and Identification of New Assessment Tools for Evaluating Asbestos at Superfund Sites. (August 2004, 4 pages). View or download at <http://www.epa.gov/superfund/programs/risk/pdf/memo722b.pdf>

Risk Assessment Guidance for Superfund (RAGS), Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment). (July 2004, 181 pages).

View or download (by section) at <http://www.epa.gov/superfund/programs/risk/ragse/index.htm>

Principles and Practices of Enhanced Anaerobic Bioremediation of Chlorinated Solvents. (August 2004, 457 pages). View or download at :

<http://www.afcee.brooks.af.mil/products/techtrans/Bioremediation/default.asp>

### GENETIC MUTATIONS LINKED TO INDOOR COAL EMISSIONS

A new study finds individuals in China who burn coal in their homes for cooking and heating may carry genetic mutations that

greatly increase their risk of developing lung cancer.

The study focuses on individuals in Xuan Wei County, China, where lung cancer mortality rates in this are among the highest in China in both nonsmoking women and men who smoke.

These high cancer mortality rates are associated with exposure to indoor emissions from the burning of smoky coal, said Dr. Phouthone Keohavong study author, an environmental and occupational health professor at the University of Pittsburgh Graduate School of Public Health.

"In order to account for the high rates of disease within this region, we tested for mutations generally associated with lung cancer in people who had no evidence of disease," Keohavong said. "We found that a good number of these individuals had mutations that indicated they were at higher risk for developing lung cancer in the future."

The study analyzed 92 individuals who had no evidence of lung cancer and screened them for two mutations thought to be primarily caused by chemicals known as polycyclic aromatic hydrocarbons, which are emitted during the burning of smoky coal.

The study found that 15 individuals, or 16.3 percent, tested positive for genetic mutations.

*(Environment News Service- 10/1/04)*

### ANTARCTIC GLACIERS MELTING FASTER THIS YEAR

Antarctic glaciers are melting and moving more quickly toward the sea in wake of the collapse of a 1,200 square mile ice shelf in March 2002, scientists said in September.

The recent events are predicted consequence of climate change and underscore the potential for sea level rise as a result of climate warming over Earth's polar caps.

The new study, led by the University of Colorado at Boulder (CU-Boulder) and a related study by NASA's Jet Propulsion Laboratory, was published online Wednesday- it was published in the September 28 issue of "Geophysical Research Letters."

University of Colorado at Boulder researcher Ted Scambos said Landsat 7 satellite images taken before, during and after the breakup of the Larsen B ice shelf in March 2002 show that several of the glaciers are now moving at up to five times their previous speed.

Other satellite data show that the glaciers also have thinned since the disintegration of the Larsen B, he said.

"The Larsen area can be looked at as a miniature experiment, showing how warming can dramatically change the ice sheets, and how fast it can happen," he said. "At every step in the process, things have occurred more rapidly than we expected."

The study also included elevation measurements from NASA's Ice Cloud and Land Elevation Satellite, or ICESat.

That study used radar images and airborne measurements to profile ice thickness in the same region of the Antarctic and showed further glacier acceleration in late 2003 and early 2004, with some glaciers reaching eight times their original speeds.

Glaciers showed an almost immediate response after the ice shelf collapse, with some nearly tripling in speed within a matter of months, according to the CU-Boulder study.

*(Environment News Service- 9/23/04)*

### NEW YORK ADOPTS 25% RENEWABLE ENERGY STANDARD

The New York State Public Service Commission adopted a requirement that 25 percent of the state's electricity come from renewable resources by 2013. The renewable energy requirement is known as a renewable portfolio standard or RPS.

"The development and use if more renewable energy resources has been a long-standing policy objective of New York State, and Governor Pataki strengthened that commitment when he proposed the 25 percent goal in his 2003 State of the State address," said Commission Chairman William Flynn said.

"Not only will it help us meet our growing demand for electricity," said Flynn, "but it also will provide additional benefits by increasing fuel diversity for our state's generation portfolio, reducing our exposure to fossil fuel price spikes and supply, interruptions, increasing economic development activity from a growing renewable industry, and improving our environmental."

To meet the 25 percent target, New York state will need to add approximately 3,700 megawatts of renewable resource generation capacity.

*(Environment News Service- 9/24/04)*

### OIL INDUSTRY SEEKS TO DOWNPLAY RISKS OF VAPOR INTRUSION IN EPA GUIDE

The oil industry is developing recommendations on assessing petroleum-associated air toxic risks in an effort to downplay EPA risk estimates in forthcoming agency guidance on how to limit indoor air contamination caused

## TECHNOLOGY UPDATES (Continued)

by leaking underground storage tanks (USTs).

The American Petroleum Institute (API) is finalizing its document and will present it to EPA as the agency develops an appendix to controversial guidance on addressing so-called vapor intrusion, which refers to indoor air contamination resulting from soil contamination that seeps into buildings. The appendix will address USTs, which the original draft guidance did not discuss, according to agency sources.

An API source says the group's plan has been developed, in part, to influence how the agency addresses petroleum hydrocarbons as a source of vapor intrusion. The group wants EPA to consider how contaminant biodegradation decreases the concentrations of contaminants that actually reach a dwelling. API had originally criticized the agency's draft guidance for failing to take degradation into account in setting screening levels, which the group claims are too strict.

According to various sources, petroleum hydrocarbon contamination, which arises most frequently at UST sites, represents a national problem because of the growing number of sites where vapors from the tanks have contaminated indoor air. For example, several states including New Hampshire, Vermont, California and Maryland are all addressing vapor intrusion from USTs.

In its draft plan, *Collecting and Interpreting Soil Gas Samples from the Vadose Zone*, API is providing a protocol for collecting soil gas samples to assess the risk of indoor contamination from vapor intrusion. The document, which API is still reviewing both internally and externally, lays out methods for sampling contaminants in the soil and how to interpret those data to determine the risk the contaminants present to indoor air.

The plan focuses on petroleum hydrocarbon-affected sites. Petroleum hydrocarbons are found in various fuels including gasoline, jet fuel and diesel fuel, and are made up of chemicals such as benzene and toluene. The sites are regulated under various statutes, including Superfund, the Resource Conservation & Recovery Act and brown-fields law.

An industry source says EPA has been resistant to increasing the attenuation factor. "EPA would rather err on the side" of being cautious, the source says, adding that the agency is "not backing off" current attenuation levels for vapor intrusion.

According to the source, the agency

predicts a tenfold decrease in a chemical's concentration from the subsurface to when it enters a dwelling. Some studies show that concentrations are as much as 1,000 times less, the source says. But in recent meetings, the agency has only provided "lip service" to the need for a change in attenuation levels, not providing any firm commitment to change its approach. The most industry officials expect from EPA is for the agency to boost its level to 100-fold decrease in concentration, the source says.

*(Superfund Report- 9/13/04)*

### BULLETIN GUIDES SOLID WASTE ESTIMATES FOR RENOVATION

Public Works Technical Bulletin (PWTB) 200-1-24, *Quantifying Waste Generated from Building Remodeling*, is now available on the internet. This bulletin provides recycling and disposal guidance to the Department of Public Works when estimating the volume of solid waste produced in different types of remodeling projects.

The U.S. Environmental Protection Agency (EPA) reports that remodeling typically produce more waste than construction projects with the same floor area. Renovation usually involves the two steps of removing, and then installing, building components. Both activities produce waste. Remodeling waste comprises 44 percent of the total construction/demolition (CD) waste stream.

Unlike demolition waste, waste from renovation projects is difficult to estimate because "renovation" is hard to define and it's tough to make comparisons when projects vary dramatically. Remodeling can encompass simple interior cosmetic changes or it may involve the complete remodeling of several buildings. The PWTB presents a process for estimating waste based on three Army renovation projects presenting typical Army projects. A detailed calculation of waste produced allows project managers to plan work focused on recycling.

*(Fielding Env. Solutions- Fall, 2004)*

### SCIENTISTS PLAN AHEAD FOR COASTAL MONITORING FROM SPACE

Red tides, oil spills, upwelling and other phenomena in U.S. coastal waters will be easier to track after a new advanced imaging instrument is launched into orbit 1012.

The device called the Hyperspectral Environment Suite will include a capability to image all U.S. coastal waters and is expected to provide critical data to resource managers and researchers studying climate, fish-

eries, coastal ecology and oceanography.

The instruments is scheduled to go into space onboard the next generation of Geostationary Operational Environmental Satellites (GOES-R).

Scientists from NOAA, NASA and the U.S. Navy are working towards the launch as part of the Coastal Ocean Applications and Science Team, COAST, which is a new effort to ensure that GOES-R data meet stringent research and application criteria to better monitor and study coastal waters.

"Having the best possible management of coastal waters will have a positive impact on America's marine economy and better protect citizens who live in coastal communities," said Gregory Withe, assistant administrator of the NOAA Satellites and Information Service. "The imageries data will also provide coastal officials improved information, enabling better decisions."

"Because it's stationary," said Withe, "GOES can stare at an area of interest for long periods, taking advantage of openings in the cloud cover to capture developments in coastal waters from start to finish."

*(Environment News Service - 10/21/04)*

### INEXPENSIVE SULFATE SALTS CAN REMOVE ARSENIC FROM GROUNDWATER

Microscopic organisms determine whether or not arsenic builds to dangerous levels in groundwater, say researchers at the University of Illinois at Urbana-Champaign. Remediation may depend on stimulating certain microbes to grow.

Arsenic contamination of water is a serious threat to human health. It has been linked to hypertension, cardiovascular disease and a variety of cancers.

In the Ganges Delta of Bangladesh arsenic contaminates many wells, but it does not stop there. The United States is affected by arsenic in many areas.

"The threat extends to Central Illinois, where there are very high levels of arsenic contamination in a number of wells," said Craig Bethke, a professor of geology at Illinois and corresponding author of a paper to appear in the November issue of the journal "Geology."

"We also discovered important links between the amount of organic material dissolved in the groundwater and the concentrations of sulfate and arsenic."

The researchers analyzed water from 21 wells at various depths in the Mahomet aquifer, a regional water supply for Central

## TECHNOLOGY UPDATES *(Continued)*

Illinois. "The Mahomet aquifer was produced by a glacier, which pulverized and homogenized the sediments," Bethke said. "As a result, arsenic sources that leach into the groundwater are pretty uniformly distributed."

But researchers were surprised when they found that arsenic concentration varied strongly from well to well, Bethke said. "Concentrations may reach hundreds of micrograms per liter in one well- which is enough to make people very sick- but fall below detection limits in a nearby well."

The concentration of arsenic varied inversely with the concentration of sulfate, the researchers found. Methane concentration also varied with the sulfate content. Sulfate reducing bacteria will consume sulfate and reduce it into sulfide. The sulfide then reacts to precipitate arsenic, leaving little in solution.

"The majority of wells in Central Illinois

belong to individual homes and farms," Bethke said. "Lacking effective water treatment and testing, private wells are more at risk of arsenic poisoning."

Groundwater contaminated with arsenic might be identified and remediated. Adding sulfate to naturally contaminated groundwater might be a simple but effective method to sequester the arsenic, Kirk said "the bacteria are already present, so all you have to do is stimulate them." Sulfate salts, he said are inexpensive, readily soluble and easily obtained.

*(Environment News Service - 10/21/04)*

### AMERICAN BIRDS DISAPPEARING FROM GRASSLANDS, CITIES

Seventy percent of U.S. grassland birds are in decline, The National Audubon Society warns in the first national "The State of the Birds" report, released in late October. The survey of the status of 654 bird species native

to the continental United States shows that America's birds are in trouble. "Like the canary in the coal mine warning the miner of danger ahead, birds are an indicator of environmental and human health," said Audubon President John Flicker. "Birds signal that we are at risk next."

Statistically significant declines were recorded for bird species in five habitat types- grasslands, shrublands, forests, wetlands, and urban areas.

Thirty-six percent of shrubland bird species, 25 percent of forest bird species, 23 percent of bird species in urban areas, and 13 percent of wetland birds species are disappearing.

Compiled by Audubon Scientist Greg Butcher, the "State of the Birds" analysis has prompted Audubon to urge the strengthening of existing environmental protections and stricter enforcement.

*(Environment News Service - 10/21/04)*

## NEW ALL APPROPRIATE INQUIRY DUE DILIGENCE OPTION

On August 26, 2004, EPA published in the **Federal Register** proposed **ALL APPROPRIATE INQUIRY (AAI)** regulations. The purpose of the regulations is to set federal standards on what due diligence steps potential property purchasers must take to limit potential future Superfund liability by qualifying for "innocent purchaser" protection. The Federal Brownfields Law authorized these regulations.

AAI regulations require more environmental due diligence work than is normally completed for Phase I Environmental Site Assessment work.

The following additional items are needed for transactions:

- Collection of information from additional parties, including buyers, sellers, and those with past knowledge of the property and any operations conducted on the property or occupancies with environmental concerns on the property.
- Added information on any investigation and remediation on the subject property.
- Information on any engineering or institutional controls on the subject property.
- Current and past uses of hazardous substances, pollutants, contaminants, petroleum, petroleum products, controlled substances and any investigation, releases and/or corrective actions related to these must be described.
- The thoroughness and reliability of the

information gathered must be assessed, and "data gaps" (where information is not available) must be described.

■ At some facilities, interviews with past and present owners, operators, and occupants will need to be conducted in further detail.

In addition, there are specific requirements that relevant information must be furnished to the environmental professional conducting the activities by prospective purchaser(s) related to environmental liens, specialized knowledge or experience of the prospective purchaser, and the relationships of the purchase price to the fair market value if the property was not contaminated.

There are also specific requirements for:

- Conducting interviews,
- Reviewing historical source information,
- Searching for environmental liens and
- Reviewing government records.

There are also regulations for qualifying for contiguous property owner liability protection.

The key performance standard is:

■ Throughout the inquiries, persons to whom this part is applicable per §312.1(b) and environmental professionals conducting the inquiry must take into account commonly known or reasonably ascertainable information within the local community about the subject property and consider such

information when seeking to identify conditions indicative to releases or threatened releases, at the subject property.

Those involved in property transactions should consider adding the "AAI Option" to their Phase I ESA if there are significant environmental liabilities at subject properties, or, if there are Superfund sites nearby.

It is projected that the AAI option will add modestly to the cost of most Phase I ESAs where sites are small and have limited environmental concerns. Larger sites or sites with complicated environmental issues could have much higher additional costs. The added requirements for government file review, including local reviews, could add one or more weeks to the due diligence process. The AAI regulations could become final by late 2004 or early 2005. The ASTM Phase I ESA process is expected to be revised along the lines of AAI regulations in the future.

RT has already completed a large number of AAI reviews to augment Phase I ESAs, and we would be glad to add the AAI option to your Phase I ESA. Please let us know when you order the Phase I ESA work so that we can complete our due diligence for you as efficiently as possible, so that the planned transaction can be completed on time.

For more information on the AAI option, call Gary Brown or Walter Hungarter at (610) 265-1510 or Chris Eyre at (856) 467-2276.



## FEDERAL REGULATORY UPDATES

### EPA AGREES TO ANALYZE SOLID WASTE RULE'S ENVIRONMENTAL RISKS

EPA will study the environmental risks posed by its plan to exempt over one million tons of hazardous waste from regulation, after the waste treatment industry and environmentalists criticized the agency's failure to study those risks when developing the proposal, according to an Office of Solid Waste (OSW) official.

Sources say the additional study may slow finalization of the rule or even force EPA to re-issue it, despite recent urgings from White House Office of Management & Budget (OMB) regulatory chief John Graham to speed its development. OMB was "interested in getting it out sooner rather than later," one EPA source says, noting that Graham during a recent meeting with EPA's waste office on pending regulatory initiatives took special interest in the hazardous waste rule and was concerned its finalization was taking too long.

EPA has developed a plan for finalizing the rule after extending the public comment period and reviewing the extensive public comments it received on the proposal, the OSW source says. However, the agency may need to issue new notices of data availability (NODAs) or additional proposed rules if EPA relies on new information or decides to pursue regulatory options that were not explicitly discussed in the original proposal, the source says.

At issue is the so-called definition of solid waste rule, which seeks to revise what is considered solid waste - and therefore potential hazardous waste - under the Resource Conservation & Recovery Act (RCRA). The agency is revising the definition after federal court rulings said EPA illegally regulated waste materials that were later recycled, rather than disposed.

The rule would amend the definition of solid waste by exempting from RCRA waste materials reused in "a continuous process within the same industry." EPA also sought comment on, although did not directly propose, a broader option under which the agency would exempt recycling across different industry sectors, an option industry groups such as the American Chemistry Council support.

The proposal has been extremely contentious, with EPA and industry defending it as a way to encourage the recycling, rather than the disposal, of wastes, which also saves resources because virgin materials are not used.

But the waste treatment industry and environmental groups charge that it could lead to bogus recycling practices to gain RCRA exemptions, known as sham recycling, as well as new Superfund and RCRA cleanup sites when recyclers mishandle newly exempted hazardous waste.

In comments on the proposal, the Environmental Technology Council (ETC), which represents the waste treatment industry, and the Sierra Club raised concerns that EPA had failed to analyze whether its proposal poses environmental risks.

According to the rule's economic analysis, "The agency notes that there is the potential for hazardous wastes to be released over time from land-based [waste treatment] units (that may or may not result in a risk to human health or the environment)." But EPA says, "It is difficult to assess the net effects of this proposal on the probability of releases of toxic constituents to the environment," and sought comment on the issue.

Now, however, EPA will conduct an analysis of those environmental risks because of the ETC and Sierra Club comments. While the OSW source says, "I personally don't think we need to do that analysis if we stick" to addressing legal issues raised by the federal court rulings, "we will do analysis of that nature."

*(Superfund Report- 8/16/04)*

### FEDS TO SET EFFICIENCY STANDARDS FOR AIR CONDITIONERS, FURNACES

The Energy Department must consider national energy conservation standards for residential furnaces and boilers, commercial air conditioners and heat pumps, and distribution transformers as required by the Energy Policy and Conservation Act of 1975. To comply with the law, Energy Secretary Spencer Abraham announced in August the upcoming publication of an Advance Notice of Proposed Rulemaking regarding energy efficiency standards for three products: distribution transformers, commercial air conditioners and heat pumps, and residential furnaces and boilers.

Each of these products will be the subject of an upcoming public meeting at which the Department of Energy (DOE) will summarize its analysis and seek public comment.

For each product the Department of Energy (DOE) has published a Framework Document that describes the procedural and analytical approaches the Department anticipates using to evaluate the establishment of energy conservation standards.

Ultimately, the Department intends to select the energy conservation standards "that achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified."

The three products subject to the August announcement, currently use a total of 6.9 quads of energy per year: distribution transformers use 1.6 quads, commercial air conditioners and heat pumps use 0.7 quads, and residential furnaces and boilers use 4.6 quads.

The framework documents and contact information for submitting comments are online at: [http://www.eere.energy.gov/buildings/appliance\\_standards/](http://www.eere.energy.gov/buildings/appliance_standards/)

*(Environment News Service - 8/2/04)*

### EPA FINALIZES EXTENSION FOR COMPLIANCE WITH THE SPCC RULE

On June 17, 2004, EPA proposed to extend, by 12 months, certain upcoming compliance dates for the July 2002 SPCC amendments. EPA has now finalized an 18-month extension for the dates in 40 CFR 112.3(a) and (b) for the facility

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to amend and implement its SPCC Plan to comply with the requirements as amended in 2002 (or, in the case of a facility becoming operational after August 16, 2002, prepare and implement a Plan in a manner that complies with the 2002 amended requirements). EPA has also amended the compliance deadlines in 40 CFR 112.3(c) for mobile facilities. EPA is granting the extension to, among other reasons, provide sufficient time for the regulated community to undertake the actions necessary to prepare and update their Plans in light of a recent partial settlement of litigation involving the July 2002 amendments. The extension is also intended to alleviate the need for individual extension requests.

This extension follows a previous 18-month extension announced on April 17, 2003, and extends deadlines for an additional 18 months from the dates promulgated at that time. The new compliance dates are February 17, 2006, to amend an existing SPCC Plan, and August 18, 2006, to implement the Plan. Affected facilities that start operations between August 16, 2002 and August 18, 2006, must prepare and implement an SPCC Plan by August 18, 2006. Affected facilities that become operational after August 18, 2006 must prepare and implement an SPCC Plan before starting operations.

The final rule was published in the Federal Register on August 11, 2004. For further information, please see <http://www.epa.gov/oilspill>.

*(Environmental Tip of the Week - 8/15/04)*

### APPELLATE COURT EXPANDS EARLIER RULING ON WORLD WAR II LIABILITY

A federal appeals court appears to have broadened an earlier landmark ruling that exempts government contractors from World War II (WWII) Superfund liability if their contracts contain indemnification clauses.

The latest ruling, in *Ford Motor Company v. United States*, is likely to provide a boost for other companies seeking to recover cleanup costs from the federal government for WWII production because the U. S. Court of Appeals for the Federal Circuit found that language in Ford's contract with the government indemnifies it from Superfund liability, even though the clause was worded differently from one cited by the court earlier this year.

In the April ruling in *DuPont v. United States*, the court rejected government arguments that an indemnification clause did not apply to Superfund liability. Observers say the ruling could force the federal government to pay for cleaning up hundreds of sites nationwide because many contracts from WWII contain similar clauses. In separate litigation filed in May, Ford said it planned to cite the *DuPont* precedent because it had a similar indemnification clause.

*(Defense Environment Alert, June 15, p10).*

## FEDERAL REGULATORY UPDATES (CONTINUED)

In the August 11 ruling, the Federal Circuit again found that an indemnification clause applied to the Superfund liability, rejecting the government's arguments that the clause applied narrowly to existing claims known at the time. "In DuPont, this court confirmed the government's obligation of indemnification for a later-arising [Superfund] claim... The corresponding claim in Ford's contract refers to property damage... and covers the [Superfund] claim here at issue."

Attorney's for the plaintiffs could not be reached for comment.

*(Defense Environment Alert - 8/24/04)*

### EPA REVISES GUIDE FOR CLEANING SITES AS ALTERNATIVE TO NPL PROGRAM

EPA has revised in controversial guidance outlining requirements industry must fulfill when cleaning up sites that the agency agrees not to place on the Superfund National Priorities List (NPL)- requirements EPA established to boost its annual list completed cleanups- after industry claimed the original document would be too stringent.

EPA officials presented the revised guidance, Revised Response Selection and Settlement Approach for Superfund Alternative Sites, during an August 17 meeting the Association of State & Territorial Solid Waste Management Officials' 2004 Superfund Managers Symposium.

In the guidance, EPA clarifies earlier requirements for participating in the program, which allows companies to avoid listing on the Superfund NPL if they agree to clean their sites up to similar levels.

The agency originally issued a guidance in June 2002 to ensure the so-called Superfund alternative sites were cleaned up to stringent levels so that the agency could include completed alternative cleanups in its declining annual total tallying construction completions. EPA also claimed the guidance would facilitate more rapid settlements and cleanups by avoiding contentious negotiations over Superfund listing.

But industry sources have long opposed the new requirements, arguing that ambiguities in the guidance would give regional officials the ability to impose more stringent cleanup levels than the Superfund program and therefore companies would be unlikely to participate (Superfund Report, August 5, 2002, p3).

EPA headquarters staff "don't realize the kind of liberties the regional staff take with their authority," an industry source says. Before these clarifications were added, companies were "very paranoid" about how the regions would interpret the document. "There seemed all kinds of horrible possibilities in it," the source adds. For example, companies were concerned that the agency would try to recover all of a site's cleanup costs on a single deep-pocket company, rather than seeking recovery from all potentially responsible parties (PRPs) based on the amount of their liability.

Now EPA has clarified the guidance, urging

regions to "be consistent" in their cleanup, settlement and enforcement approach at these sites. "Regions should follow practices normally employed at NPL sites, while also taking steps to ensure equivalency in the absence of an NPL listing," the memorandum states.

Companies also questioned the earlier memorandum's financial assurance structure. According to the industry source, companies were concerned that they would be required to set aside funds equal to the costs of the cleanup, while paying out an equal amount for cleanup itself. Doing so would amount to a company having to "pay for the site twice," the source says.

But the revised memorandum now makes clear that money must only be set aside during the time it takes to list a site if a party backs out of an alternative site agreement. "Regions should ensure that PRPs provide some amount of that financial assurance through a liquid instrument(s) at least equal to the costs that would be imposed on EPA to keep cleanup work going through the listing process, in the event the site needs to be listed."

The industry source says the changes make for a "more viable program" because they will make private parties more willing to participate. Before the revised memorandum was issued, companies were concerned that the guidance would create an "out-of-control program" that would fewer safeguards than the NPL.

*(Superfund Report - 8/30/04)*

### RESPONDING TO EPA SECTION 104(e) SUPERFUND LETTERS

EPA Section 104(e) letters cause complaints concerning the amount of work involved, or the expense of the effort needed to fully respond to very intrusive questions posed by EPA. EPA seeks to identify not only the hazardous substances a company may have used or generated many decades in the past, the names and addresses of former employees and suppliers who might have better memories, as well as the company's financial condition, in the event EPA later seeks to direct the company to participate in an RI/FS or RD/RA process.

A recent Sixth Circuit decision arising out of a case in Tennessee underscores the significant risk to companies who choose not to respond, or to respond late. In *United States v. Gurley* (No. 03-5132, September 21, 2004), 2004 WL 2092994, the Sixth Circuit Court of Appeals upheld a lower court's imposition of a \$1,908,000 civil penalty against William Gurley for his failure to respond to a 104(e) letter concerning waste disposal practices at a disposal site he was alleged to have had some connection with. The fact that Gurley was deposed and provided information of the kind originally sought by EPA in the 104(e) letter, eventually responded to the letter under court order, or filed a petition in bankruptcy, did not save him from the court's wrath.

This case illustrates why companies must respond to Section 104(e) letters (or their cousins issued under RCRA or Section 114 of the CAA),

promptly and fully. EPA often grants extensions of time to respond to the communicative letter recipient, but due dates for responses should never be forgotten or ignored.

Courtesy of - Timothy Bergere, Esq.

Montgomery McCracken Walker and Rhoads

### EPA WATER, PESTICIDE OFFICES STRUGGLE TO CRAFT NEW ARSENIC RISK VALUE

EPA water office officials are raising concerns over an effort by the agency's pesticide office to adopt a less stringent risk assessment value for arsenic based on new studies that show it is less toxic to animals than competing studies on its toxicity to humans, EPA and industry sources say.

Agency sources say Office of Water (OW) staff are concerned that pesticide officials may adopt the new risk values as part of an effort to re-register two chemicals that contain arsenic before a 2005 deadline. The OW staff fear that these risk values would not sufficiently protect against arsenic exposure from drinking water supplies and could undermine their efforts to implement EPA's strict drinking water standard that is set to take effect in 2006.

Pesticide officials say the agency may need to conduct separate risk assessments for organic arsenic- which is contained in the two chemicals- and inorganic arsenic- which is generally found in drinking water- based on their different human health impacts.

Any future drinking water standard could also be significant because EPA and state regulators use the standard to set cleanup levels at hazardous waste sites.

EPA sources say the assistant administrators of the water and toxics offices are closely watching the debate as agency officials anticipate legal action by environmentalists if two assessments are developed, and by industry if they continue to rely on a single risk level for both organic and inorganic arsenic.

"It's a question of who's going to get sued," an EPA source says. "If we stay the same, the pesticide industry will sue because they feel they have the data to support a separate risk evaluation [for organic arsenic]. If you divide them, environmentalists will probably sue over water policies" because a single assessment could undermine EPA's 10 parts-per-billion drinking water standard that takes effect in 2006.

Agency sources say OW staff argued at an Oct. 1 meeting that while the new studies show that low levels of arsenic do not create increased cancer risk in rats, the findings do not necessarily indicate that a less protective standard should apply to humans.

EPA's risk assessment for arsenic, as reflected in the agency's Integrated Risk Information System (IRIS), is based on studies conducted in Taiwan that show a positive, linear relationship between the presence of arsenic in the environment and the presence of cancer in humans. The studies indicate that stricter federal regulation of arsenic exposure beyond a certain point will not

## FEDERAL REGULATORY UPDATES (CONTINUED)

lower cancer rates.

The agency is facing a deadline to re-register the chemicals by spring 2005, and is now trying to determine to what degree it should consider the new studies in its re-registration decision. The chemicals- a herbicide known as DMA and wood preservative known as CCA- contain arsenic, among their ingredients.

The discussions over whether two different risk values are needed, or whether the agency should simply revise its current risk value for inorganic arsenic, have delayed the workgroup's recommendations on the risk assessment revision to EPA staff, the industry source says. In July, EPA sources said the workgroup would make its recommendations in several weeks, but has not yet done so.

It is unclear whether the workgroup will recommend proceeding with two separate risk values, or one risk value based on their analysis of the combined effects of ne studies coupled with the NAS' earlier recommendations, the industry source says.

*(Superfund Report- 10/11/04)*

### EPA REPORTS ON CSO, SS DISCHARGES

The Environmental Protection Agency has released a report to Congress on the extent if human health and environmental impacts caused by municipal combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs), including the location of discharges, the volume of pollutants discharged, the constituents discharged, the resources spent by municipalities to address these impacts, and the technologies used.

This is the second of two reports that Congress requested on the impact of CSO and SSOs. The first report was sent to Congress in December 2001 as Report to Congress- Implementation and Enforcement of the Combined Sewer Overflow Control Policy.

In its new report, EPA estimates that the annual CSO volume is approximately 850 billion gallons, down from over 1 trillion gallons prior to the CSO Control Policy. EPA also estimates that the number of CSO events has dropped from approximately 60,000 prior to the CSO Control Policy to around 43,000, or a reduction of 28 percent since the issuance of the CSO Control Policy.

The EPA report demonstrates that the nation's clean water agencies are working hard to improve public health and the environment, according to Ken Kirk, Executive Director of the Association of Metropolitan Sewerage Agencies.

"Clean water facilities have done an outstanding job in reducing sewer overflows but federal funding is needed to address the \$88 billion and \$50.6 billion EPA-estimated cost to fully control SSOs and CSOs, respectively, over the next 20 years," Kirk said "It is imperative that EPA also develop a flexible SSO policy that incorporates watershed planning principles and allows communities to direct resources to those areas that will best improve public health and the environment."

This second study, "Report to Congress on the Impacts and Control of CSOs and SSOs" is organized into sections addressing both CSOs and SSOs:

- Characterization
- Environmental impacts
- Human health impacts
- Control technologies
- Resources spent

A full copy of the report is available on the Internet at <http://www.epa.gov/npdes/csosoreport2004>

*(WaterWorld- 10/04)*

### COLORADO SETS FIRST-TIME WATER STANDARD FOR DIOXANE

Colorado regulators last week backed first-time enforceable water quality standards for widespread chemical contaminant that the Defense Department and industry groups are identifying as an emerging concern.

The state backed the standard-joining several EPA regions and 10 states that have set weaker environmental goals- despite arguments from industry groups that officials hold off until after EPA completes a review of the risks posed by exposure to the chemical, 1,4-Dioxane, for its Integrated Risk Information System (IRIS) database.

However, EPA urged the state to adopt the standard and revise it if the agency's IRIS review necessitates changes, according to a letter to the state from EPA Region VIII.

An EPA source says the state's decision to pursue an enforceable standard is "unusual" because few states have adopted strict standards for the chemical.

The chemical which is produced in a liquid form, used as a solvent for paper, cotton and textile processing and for various organic products. It is also used in automotive coolant liquid, and in shampoos and other cosmetics, according to EPA.

The Colorado Water Quality Control Commission Sept. 14 adopted a first-time water quality standard for the chemical, which is used in industrial solvents that are ubiquitous at hazardous waste sites and other industrial facilities. The commission voted to approve a phased-in groundwater and surface water standard, requiring facilities to meet a 6.1 parts-per-billion (ppb) standard by next March and a 3.2 ppb standard by March 2010.

Colorado joins three EPA regions and 10 states that have already acted to limit human exposure to the chemical, although none of the other entities has issued an enforceable standard. For example, EPA Region IX has set a preliminary remediation goal of 6.1 ppb, while Delaware has set a 6 ppb cleanup standard. Other states which have taken action include California, Michigan, Missouri, Pennsylvania, Texas and Washington.

However, Colorado appears to be the first entity to adopt an enforceable water quality standard for 1,4-Dioxane in ground and surface water. The current standard will be enforceable in March 2005 in current and future discharge

permits, as well as in cleanup efforts at hazardous waste sites.

Of the other entities to have acted to limit exposure to the chemical, Delaware currently has a remediation standard for ground water, but sources say it is not an enforceable condition written into future discharge permits. California has an "action plan" for 1,4-Dioxane that can be implemented on a case-by-case basis at hazardous waste sites, state and industry sources say, but it is not a standard water quality officials must follow.

However, Colorado's efforts are drawing strong criticism from industry groups, who say the commission's decision was premature, given that EPA may update the acceptable exposure levels for 1,4-Dioxane in the next two years. The groups claim a new study shows an acceptable risk level of the chemical is 200 (ppb), which is significantly weaker than the standard the state will begin enforcing next March.

The study, which was detailed at a groundwater cleanup conference in 2003, was conducted by industry consultants who found that EPA's cancer estimates for the chemical "significantly overestimates the potential cancer risk," according to a summary of the study issued by the conference organizers. The summary notes that the study's authors were convening an industry consortium on the chemical, with backing from the Synthetic Organic Chemical Manufacturers Association.

*(Defense Environment Alert- 9/21/04)*

### EMISSIONS DOWN IN 2003, EPA REPORTS

Total emissions of the six principal pollutants identified in the Clean Air Act declined in 2003, the U.S. Environmental Protection Agency (EPA) announced in September.

Administration officials said the finding indicates that the nation's air is the cleanest in three decades.

The new report finds that since 1970, the aggregate total emissions for the six pollutants have been cut from 301.5 million tons per year to 147.8 tons per year, a decrease of 51 percent.

The six pollutants are carbon monoxide, nitrogen oxides, sulfur dioxide, particulate matter, volatile organic compounds and lead.

The EPA said total 2003 emissions were down 12 million tons since 2000, a 7.8 percent reduction.

*(Environment News Service- 9/23/04)*

### EPA THREATENS CUTS UNLESS REGIONS ADOPT NEW CLEANUP METHODS

EPA is warning its regional offices they may face funding cuts if they do not adopt new strategies to conserve resources at costly groundwater cleanups, according to a new agency document.

In an Aug. 25 action plan, developed in response to state officials' concerns that they lack funding to manage the expensive cleanups, EPA lays out the steps it will take to improve its groundwater remedies at Superfund sites, known

## FEDERAL REGULATORY UPDATES (CONTINUED)

as "optimization." Optimization involves finding less expensive and more timely means to cleanup contaminated groundwater. The agency is in the process of issuing numerous fact sheets explaining how to optimize cleanup, including how to develop a more cost-effective design for pump and treat systems and ways to improve contracting at these sites.

In the document, Action Plan for Groundwater Remedy Optimization, the agency makes clear that the amount of effort a region makes in optimizing these remedies will play a key role in how much funding it receives from headquarters. "Site-specific progress in optimization implementation will be a significant factor in addressing Regional funding requests... Due to funding limitations, we are not in a position to continue funding non-optimized systems at the same levels as previous years," the document states.

An agency source says EPA wants to assure states that the agency is serious about implementing these changes. EPA wants to "smooth the transition" to the states, the source says, adding the plan will show that the agency will continue to work to optimize these operations. There are 85 active fund-lead pump and treat projects and over 700 sites have used pump-and-treat since 1982.

*(Superfund Report- 9/13/04)*

### EPA ISSUES LAND USE CONTROL PLAN TO ADDRESS DELETED SUPERFUND SITES

In anticipation of an independent audit, EPA has issued a new strategy for implementing land use controls at Superfund site that will address the agency's failure to apply the controls at sites that have been removed from the Superfund National Priorities List (NPL), according to an EPA document obtained by Inside Washington Publishers.

The document, titled Strategy to Ensure Institutional Control Implementation at Superfund Sites, aims to create a consistent EPA approach when applying the controls, known as institutional controls (ICs), at Superfund sites, identify any problems with ongoing ICs and prevent future IC problems. The document is meant to "serve as a roadmap for EPA regional and headquarters personnel in preparing region-specific action plans and conducting the work necessary to ensure the proper implementation of ICs at Superfund sites," the document states.

The effort comes, in part, in response to criticism from states and in anticipation of an upcoming Government Accountability Office audit of the IC program. "When you have that level of interest at different levels of government, it's something you need to pay attention to," the source says.

ICs are administrative and legal controls used to minimize the potential for human exposure contamination when a site is not cleaned up to unrestricted use. Examples of ICs include zoning, building or excavation permits, well drilling prohibitions, and land use restrictions, such as easements.

Specifically, the strategy will identify and implement changes to EPA practices, including revisiting model consent decrees, orders, remedy decision documents, statements of work. Close-out procedures and five-year reviews to ensure they allow ICs and evaluating whether they continue to be implemented. The agency will also identify problems with outside groups, including other federal agencies, state officials, tribes and potentially responsible parties (PRPs), the document states.

*(Superfund Report- 10/25/04)*

### EPA MAY DELAY WIPES AND TOWELS RULE PENDING FOR RISK REVIEW

EPA may be forced to delay its controversial rule exempting industrial wipes and towels from hazardous waste requirements unless it can obtain funding to reevaluate and respond to public comments on a risk assessment used to develop the rule, according to a top waste office official.

"The rulemaking can't go forward without the Office of Solid Waste (OSW) being able to answer comments on the risk assessment," the source says. However, "there are not a lot of resources for that" in EPA's fiscal year 2005 budget, the source says.

The source says EPA lacks in-house resources to respond to the concerns, which include claims that the agency relied on faulty assumptions about the amount of solvent that would end up in landfills from the contaminated industrial shop towels and wipes and the amount of sludge laundries generate.

OSW will try to get funds to reevaluate the risk assessment during forthcoming discussions only EPA's FY05 operating plan, which lays out where funding in EPA's budget is allocated.

The reevaluation will also respond to comments from a peer review panel, which EPA decided to address after also receiving comments from the public to avoid revising the risk assessment twice, according to the source and the proposed rule.

Under the wipes and towels rule, EPA is proposing to exempt from the Resource Conservation & Recovery Act both disposable and reusable industrial shop towels and wipes if certain management conditions are met.

*(Superfund Report- 10/25/04)*

### RULES GOVERNING HEXAVALENT CHROMIUM EXPOSURE PROPOSED

The Occupational Safety and Health Administration (OSHA) published in the Federal Register three proposed rules designed to reduce worker exposure to hexavalent chromium, the carcinogenic chemical featured in the film "Erin Brockovich."

OSHA is proposing three separate standards that cover exposure to hexavalent chromium in general industry, construction, and shipyards. The agency is accepting public comments on the proposed standards until January 3, 2005.

The proposed new permissible exposure limit is 50 times lower than the existing standard, but

is still four times higher than requested in 1993 in a petition by Public Citizen.

OSHA is proposing to lower its permissible exposure limit for hexavalent chromium (CrVI) and for all of its compounds in construction, shipyards, and general industry from 52 to one microgram of CrVI per cubic meter of air as an 8-hour time weighted average.

In general industry, OSHA makes an exception for CrVI used as a pesticide, to treat wood, for example. In construction, the agency makes an exception for Portland Cement.

The agency would require exposure monitoring only in its proposed general industry standard for hexavalent chromium, but not in its shipyard or construction standards.

The proposed rule also includes provisions for employee protection such as preferred methods for controlling exposure, respiratory protection, protective work clothing and equipment, hygiene areas and practices, medical surveillance, hazard communication, and recordkeeping.

*(Environment News Service - 10/5/04)*

### GOVERNMENT RAISES NOVEL RCRA ARGUMENT IN SHIP EXPORT DISPUTE

The Department of Justice (DOJ) is citing an infrequently used provision of the Resource Conservation & Recovery Act (RCRA) to convince a federal judge contaminated government vessels are "scrap metal" and therefore free from RCRA export restrictions.

One environmental attorney familiar with the litigation says it may be the first case to address the scope of the RCRA exemption for scrap metal, which frees exporters from stringent notification and consent requirements under the law. The court could set a precedent on the provision's reach, the source says.

DOJ attorneys could not be reached for comment, but did not cite any legal precedents about the provision in earlier court filings in the case.

The governments' attorneys raised the issue during Oct. 15 oral arguments before the U.S. District court for the District of Columbia in ongoing litigation brought by environmentalists to block government plans to send former military vessels to the United Kingdom for dismantling.

The suit, Basel Action Network et al. V. Maritime Administration, charges that the plan by the Department of Transportation's Maritime Administration (MARAD) violates the export provisions of RCRA and the Toxic Substances Control Act (TSCA). MARAD is required to meet a congressionally mandated deadline of 2006 to dispose of more than one hundred decrepit ships, known as the "ghost fleet," which are contaminated with polychlorinated biphenyls (PCBs), mercury, asbestos, and large amounts of diesel fuel.

Both TSCA and RCRA play a role in the dispute because PCBs are regulated under TSCA, while the other contaminants at issue are regulated under RCRA. Environmentalists are seeking summary judgment prohibiting the wastes from being shipped without receiving specific exemp-

## FEDERAL REGULATORY UPDATES (CONTINUED)

tions from federal law, without specific consent from the United Kingdom, and proof that the receiving facility has the necessary permits.

Activists argue that the ships are so contaminated that they should be considered hazardous waste and treated as such under RCRA. They also say EPA- which is also a party to the suit- improperly granted MARAD a waiver from a TSCA provision that forbids PCB exports.

However, DOJ attorneys told Judge Rosemary Collyer that only certain portions of the ships were contaminated and could be separated out and disposed of, meaning RCRA would not apply until the ships are dismantled. Collyer questioned both sides about whether the RCRA scrap metal exemption should apply in the case, and also whether environmentalists had standing to bring suit under TSCA. It is unclear when the court may rule in the case.

*(Defense Environment Alert- 10/19/04)*

### EPA LIKELY TO SEEK FULL APPELLATE REVIEW OF RARE AIR RULE 'VACATUR'

EPA is planning to appeal a precedent-setting federal appellate decision vacating defective air quality standards rather than remanding them to the agency for reconsideration, sources tracking the issue say.

EPA is particularly worried that is the ruling is allowed to stand, future courts can rely on the precedent to vacate rules that could be easily remedied, leaving the agency without any standard and potentially harming the environment, attorneys say.

Attorneys familiar with the case say EPA and the Department of Justice (DOJ) are leaning strongly toward asking the U.S. Court of Appeals for the District of Columbia Circuit to review the July 23 ruling in *Honeywell International Inc. v. EPA*, in which a three-judge panel of the court vacated an EPA rule on acceptable alternatives to ozone-depleting substances.

"DOJ and EPA are certainly going to be asking for a review, the scope of which is not determined yet," one industry attorney says. "I would be quite surprised if they did not file for an en banc review."

The government had to file a petition for a rehearing by Oct. 7.

By vacating the rule, the court ensured its decision would be effective immediately because the rule instantly becomes unlawful. In contrast, remanding the rule- a more common court action- would have kept it in place while EPA considered how to address issues the decision raised.

The decision forced EPA to abandon its approval of some alternative to hydrochlorofluorocarbon (HCFC)- 141b, a "blowing agent" used in foam insulation that is being phased out under the Montreal Protocol to protect the ozone layer. Honeywell, which manufactures an approved substitute to HCFC-141b, sued the agency for approving other alternatives developed by ATOFINA Chemicals.

One judge on the panel suggested in a dissenting opinion that the issue of whether courts can vacate clean air rules without remanding them to EPA may require an en banc review by the entire

court. "Because EPA might wish to retain the rule on review, and might be able to easily cure any defect, vacating the rule risks unnecessary disruption to the regulatory scheme," Judge Judith Rogers wrote.

Rogers also noted that vacating the rule may actually increase the use of the very chemicals Honeywell is trying to take off the market. "In the past, where vacatur of a rule risks interim harm to the environment, the court has allowed successfully challenged EPA rules to remain in effect pending remand. Given the possibility of confusion and environmental harm, the same course of action is warranted here." Rogers wrote. DOJ and EPA did not return calls for comment.

*(Defense Environment Alert - 10/5/04)*

### EPA CHIEF VOWS TO REDUCE DIESEL EMISSIONS

The nation's top environmental officer suggested that diesel smoke may soon be a thing of the past.

Mike Leavitt, administrator of the EPA, told the audience at a Phoenix clean-air awards ceremony that diesel smoke could be almost nonexistent with a decade. The result would be cleaner air and fewer health problems nationwide.

Leavitt was a last-minute addition to the Clean Air Campaign's annual awards meeting, held to recognize Phoenix-area companies for efforts to reduce driving. He noted that the recent non-road diesel rule could pave the way to phase out the smoke and odor created by diesel engines over the next decade.

The improvements resulting from the diesel clean-up regulations will begin in 2007 and continue during the following decade, potentially reducing the sulfur content in diesel fuel.

*(Env. Tip of the Week- 11/1/04)*

### SOURCES OF ARSENIC IN VIRGINIA WATER EXPLORED

At a site near the Virginia Tech campus, arsenopyrite, an arsenic-bearing sulfide, was mined from 1903 to 1919 for use in pesticides. Researchers from the university have discovered that a stream adjacent to the site is receiving arsenic from groundwater that flowed through the mine, but that some of the pathways from the mine to the stream and the conditions of discharge from groundwater into the stream are first steps to possible remediation and control, said Madeline Schreiber, assistant professor of geosciences at Virginia Tech. "Arsenic was used in pesticide. The extraction process involved heating the ore so that the arsenic would oxidize as a white powder," Schreiber said.

Schreiber's goal is to figure out how to prevent arsenic from getting into the drinking water sources. "we are trying to determine the biogeochemical controls on arsenic release. In this case, release was accelerated through human activity-mining. But we are also looking at how the mineral weathers; then, once it is in the water how it interacts with the sediment and with bacteria." Schreiber and associate professor of biology Maurice Valett are lead investigators on a

National Science Foundation funded project that began in 2002 on the transport, transformation, and retention of arsenic in a headwater stream and possible hydrologic, biological, and geochemical controls. "The change that occurs as anaerobic [oxygen-free] groundwater discharges to aerobic surface water impacts the transport of arsenic.

Arsenic is more mobile under anaerobic conditions, while under aerobic conditions, it is bound to iron minerals," she said. "So we are asking, "What happens to arsenic as it is transported from groundwater to surface water? It is retained at the interface between the two zones? Since research has demonstrated that arsenic is a carcinogen, the U.S. standard for arsenic in drinking water has been lowered from 50 to 10 parts per billion, which is the same as the European Union standard.

Since much of the arsenic contamination is natural, rather than as a result of industry, "and a little bit goes a long way," Schreiber said, "the taxpayers will have to pay for prevention. But prevention is less expensive than remediation." Schreiber and Valett were to present their findings at the 116th national meeting of the Geological Society of America in Denver, Colorado, November 7-10.

*(Environment News Service - 11/2/04)*

### FINAL PM DOCUMENT RELEASED

EPA has released the final scientific assessment document on airborne particulate matter, "Air Quality Criteria for Particulate Matter."

Particulate matter (PM) is one of six principal of criteria pollutants for which EPA has established National Ambient Air Quality Standards (NAAQS) under the Clean Air Act. In accordance with the requirements of the CAA, EPA periodically reviews the scientific basis for these standards. This document provides significant new information for the technical and policy assessments of EPA's review of the standards.

The document includes an analysis of very large amount of new scientific literature generated since the NAAQS for PM were revised in 1997. This final assessment document has been subjected to expert scientific peer review by the Clean Air Scientific Advisory Committee, a review committee mandated by the Clean Air Act and part of the EPA's Science Advisory Board.

Information on the Criteria Document, PM research and some of the major actions EPA is taking to reduce PM is the following Web site:

The "Air Quality Criteria for Particulate Matter" document is at :

<http://www.epa.gov/pmresearch>.

*(Env. Protection - 11/4/04)*

### FEDERAL TAX DEDUCTION FOR REMEDIATION RENEWED

Federal tax abatements for remediation costs have been renewed. Many companies and developers are not aware that costs spent for remediation are, in most cases, tax deductible.

See your accountant for more information. Many of RT's clients have taken advantage of this provision to make property redevelopment more cost-effective.

## NJ REGULATORY UPDATES

### NEW JERSEY DIGS INTO UNDERGROUND STORAGE TANK VIOLATIONS

DEP Commissioner Bradley Campbell in August announced the start of a new statewide underground storage tank compliance inspection program to prevent pollution by reducing the number of leaking tanks.

"Performing comprehensive underground storage tank inspections will protect our ground water resources from gasoline and other contamination," said Campbell. "Millions of New Jersey residents get their drinking water from aquifers that are vulnerable to pollution from leaking tanks."

In November 2003, New Jersey voters approved a referendum to provide DEP a stable funding source of up to \$2 million annually to create an underground storage tank inspection program.

In New Jersey, there are more than 22,000 regulated underground storage tanks at about 8,000 facilities. State and federal laws require all owners and operators to maintain leak detection, corrosion and overfill prevention and other measures to prevent tank leaks.

The DEP is establishing a group of 18 state and county inspectors to conduct compliance inspections at each facility once every three years. Owners and operators of underground storage tanks also must register their tank systems with DEP on a three year cycle.

In the past, state underground storage tank inspections were conducted on the basis of complaints or referrals to DEP's Site Remediation Program. In addition, some county health agencies conducted inspections and were reimbursed through the DEP's County Environmental Health Act program using state Spill Fund monies. In 2003, there were 781 inspections statewide.

DEP plans to fund nine county inspectors and provide training and other assistance, including specialized equipment to properly inspect underground storage tanks. DEP also is hiring nine state inspectors to conduct compliance and inspection activities out of three state field offices, including oversight and assistance to county partners.

Operators and fuel transporters that disable or defeat tank system overfill devices, and fuel transporters that place fuel into tanks lacking valid registration certificate, will also be targeted by inspectors.

Defeating an overfill prevention device may cause a sudden release of flammable liquid into the environment. Placing fuel into unregistered or improperly registered tanks also risks a release to the environment as the tanks could be substandard or being operated improperly.

The typical penalty for violations at commercial gas stations is \$15,000, but fines can soar for wider violations.

*(Environment News Service - 8/19/04)*

### NEW JERSEY SUES EXXONMOBIL FOR WATER POLLUTION

The State of New Jersey has filed natural resource damage complaints against ExxonMobil Corporation over ground water contamination at two refinery sites, Exxon Bayway in Linden and Exxon Bayonne, Governor James McGreevey said in August.

In a second set of actions, Department of Environmental Protection (DEP) Commissioner Bradley Campbell issued an administrative subpoena and a request for information to ExxonMobil regarding nearly 1,000 gas station sites in New Jersey where ExxonMobil may be responsible for hazardous substances that were discharged.

A third set of actions involves four additional natural resource damage suits filed against defendants responsible for contamination at sites in Parsippany- Troy Hills, Rahway, Newark and Hawthorne.

"We are pursuing natural resource damage claims throughout New Jersey, working with DEP to ensure that where polluters have harmed our environment, they are required to clean up the site and compensate state residents for the loss of natural resources," said Attorney General Peter Harvey. "We are reviewing hundreds of potential claims."

ExxonMobil balked at the opportunity to resolve its liability for extensive ground water damage the company caused in Linden and Bayonne through a reasonable settlement," said Campbell. "Make no mistake, New Jersey will take ExxonMobil and other companies that pollute our state's waters to court when they do not settle rightful claims for natural resource damages."

The Exxon Bayway facility includes 1,300 acres of property in Linden and the Exxon facility includes 288 acres of property in Bayonne, New Jersey.

From 1877 through 1993, ExxonMobil Corporation or its predecessors conducted petroleum refining operations at the facilities, including the receipt, storage and shipment of crude oil, partially refined oil, and a wide range of petroleum products, and they conducted petrochemical manufacturing operations at the Linden site.

The natural resource damage suits, which have been brought under New Jersey's Spill Compensation and Control Act and the common law, seek to have the polluters compensate the residents of New Jersey for damage to or loss of the use and benefit of a natural resource injured by a discharge of hazardous substances.

*(Environment News Service - 8/23/04)*

### NEW JERSEY DEFINES CARBON DIOXIDE AS A CONTAMINANT

New Jersey has redefined the greenhouse gas carbon dioxide as an air contaminant. This definition clears the way for New Jersey to participate in a regional greenhouse gas emissions reduction program.

The definition of carbon dioxide as a contami-

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nant has been controversial, and the Bush Administration has declined to support such a definition.

New Jersey is part of nine state Regional Greenhouse Gas Initiative <http://www.rggi.org/> that is working to reduce carbon dioxide emissions from power plants. Other participating states are Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.

In addition, Pennsylvania, Maryland, the District of Columbia, the Eastern Canadian provinces and New Brunswick are participating as observers in the initiative.

RGGI participating states are developing a regional strategy for controlling emissions by establishing a multi-state cap-and-trade program with an emissions trading system. The proposed program, which will require electric power generators in participating states to reduce carbon dioxide emissions, is planned to be designed by April 2005.

The New Jersey Department of Environmental Protection (DEP) will revise several air pollution control rules, bringing them in line with what state officials see as the current scientific consensus that carbon dioxide is an air contaminant.

As part of the rule proposal, the DEP is publishing a formal determination that carbon dioxide emissions are responsible for adverse impacts on human health and the environment by contributing to global warming.

The proposed confirmation that carbon dioxide is an air contaminant was to appear in the October 18, 2004 New Jersey Register and will be subject to a 60 day public comment period.

*(Environment News Service- 9/20/04)*

### NEW JERSEY CRACKS DOWN ON POLLUTANTS IN CONSUMER PRODUCTS

Dozens of consumer products containing volatile organic compounds (VOCs) such as adhesives, paint strippers, and air fresheners may soon be subject to stricter emissions regulations proposed by the state of New Jersey.

The Department of Environmental Protection is proposing the new rules to control the emissions of VOCs and toxics from consumer products. The new requirements will apply to manufacturers, distributors, suppliers and retailers of consumer products.

The new rules would apply to automotive windshield washer fluids, insecticides, and cleaners containing VOCs; and portable fuel containers from which VOCs may be emitted when gasoline or other fuels are poured into or out of the container or stored in the container.

New limits would also apply to personal care products such as hair spray and shaving cream

## NJ REGULATORY UPDATES *(Continued)*

and to colorants and ethanols in antiperspirants or deodorants.

The rulemaking is intended to reduce VOC emissions, which are precursors of smog, and to assist in the attainment of one-hour ozone National Ambient Air Quality Standard and the eight-hour ozone health standard.

Considering both categories and product forms, the number of regulated VOC content limits is increased from 41 to 89.

If approved, these 89 VOC content limits take effect on January 1, 2005, and supersede the existing state standards that become operative on April 30, 1996.

*(Environment News Service - 10/18/04)*

### NEW JERSEY PARKS, FOREST YIELD \$1.2 BILLION PER YEAR

New Jersey's 39 parks and 11 forests provide economic benefits amounting to at least \$1.2 billion per year, or \$30 billion over a 25 year period, according to a study released by Department of Environmental Protection (DEP) Commissioner Bradley Campbell.

The study, entitled "The Economic Value of New Jersey State Parks and Forests," was conducted by the DEP's Division of Science, Research and Technology. It found that New Jersey's parks and forests creates almost 14,000 jobs, positively impact property values and provide enhanced public services including education.

"This study quantifies the importance of New Jersey's state parks and forests as an asset to our economy and underscores the necessity of maintaining our natural open space," said Campbell. "We get the best return on our investment by nurturing our parklands and forest resources."

The study found that New Jersey's parks and forests provide \$812 million in benefits from recreation and tourism each year, including the indirect economic activity generated by recreation and tourism expenditures.

*(Environment News Service- 10/5/04)*

### NEW JERSEY INDUSTRIAL POWER GENERATORS FACE EMISSIONS CUTS

The New Jersey Department of Environmental Protection (DEP) is proposing new rules governing air pollution from nitrogen oxides (NOx) and volatile organic compounds- both components of smog.

The new rules and amendments would apply to owners or operators of stationary sources of NOx emissions, including industrial, commercial, and institutional boilers, combustion turbines, and reciprocating engines.

This proposed rule for additional NOx control measures is the last of the six measures, and the proposal constitutes a proposed revision to the state's Ozone State Implementation Plan (SIP).

If approved, these new rules and amendments would apply to owners or operators of stationary

sources of NOx emissions, including industrial, commercial, and institutional boilers, combustion turbines, and reciprocating engines.

Owners or operators of these sources would be required to achieve the emission rate limit specified in the rules or to comply instead with alternatives if technically or economically infeasible.

These rules also would regulate emissions from distributed generation- the use of small scale electric generating technologies installed at, or near, the end user's location.

The proposed new rules would seek better control on diesel electric generators and encourage the use of cleaner technologies, such as fuel cells and microturbines.

*(Environment News Service -10/21/04)*

### NEW JERSEY BANS NON-NATIVE PLANTS ON STATE LAND

New Jersey is prohibiting the planting of non-native species on state lands, and the Department of Environmental Protection (DEP) has issued an advisory list of 20 tree species, 40 shrub species, 15 vine species, 66 herb species, and 16 grass and sedge species that are no longer welcome on public lands in New Jersey.

The list contains just a fraction of the more than 1,200 nonindigenous plants in New Jersey that have been introduced, accidentally or intentionally, mostly from Europe and Asia. Because these tend to have few natural predators or parasites on this continent, they are aggressive competitors for space and nutrients in New Jersey's natural areas.

The new policy is intended to reduce the spread of these invasive species that choke out New Jersey's natural plants and threaten wetlands and waterways, said the DEP Commissioner Bradley Campbell, announcing the directive.

"State agencies need to lead by example and stop planting invasive species on land that we manage," said Campbell. "This is a small, but important step in our long-term struggle to address this significant threat to New Jersey's rich natural heritage."

Invasive species also threaten New Jersey's agricultural resources through lost production and marketability for agricultural products.

In July 2003, the Final Report of the New Jersey Comparative Risk Project identified invasive species, including plants, insects and other organisms, as one of the top four environmental problems facing New Jersey.

*(Environment News Service - 10/19/04)*

### BILL ON MERCURY MOVES FORWARD

A bill to ban mercury thermometers was approved unanimously in early November by the Assembly Environment Committee. The measure now heads to a floor vote in the full Assembly.

Ed Knorr, chairman of a local environmental group, had sought sale of all mercury thermome-

ters in the state after learning of incidents in local schools involving broken thermometers.

Assemblyman David Mayer, D-4, drafted the legislation. In a statement from Assembly Democrats, Mayer said he introduced the bill in order to protect the environment.

The bill titled the "New Jersey Mercury Products Reduction Act," would prohibit all sales and distributions of mercury thermometers for any reason, including promotional purposes. Knorr said the bill could be expanded to include bans on thermostats and lamps that include mercury.

Connecticut, Illinois, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, Oregon, Rhode Island and Washington, have outlawed the sale of mercury thermometers.

*(By Erin L. Boyle- Glouc. Cty. Times/ 11/8/04)*

### NEW JERSEY CONVERTS FORMER CLAY MINE TO BIRD HABITAT, WETLANDS

The state of New Jersey is purchasing a 597 acre former clay mine in Quinton Township, Salem County and adding the land to Maskells Mill Pond Wildlife Management Area.

The conversion of the S.V. Farming property will protect the headwaters of Stow Creek, which discharges into the Delaware Bay. The property is covered with forested wetlands and uplands that are ideal for groundwater recharge.

The Maskells Mill Pond Wildlife Management Area supports a diverse bird population including the bald eagle, prairie warbler, scarlet tanager, wood thrush and bobwhite quail.

"This acquisition underscores the importance of protecting New Jersey's natural resources and restoring those that have been damaged or destroyed," said Commissioner Bradley Campbell, who heads the state Department of Environment (DEP). "In this case, almost 20 acres of mined wetlands have been restored and permanently preserved and can once again serve as critical habitat for wildlife."

An extensive wetlands restoration project migrated the effects of previous mining activity on the property. The 10 year project restored of 18.4 acres of high resource wetlands and the created an additional 9.9 acres of wetlands. The DEP Green Acres Program purchased the \$550,000 S.V. Farming site from Waste Management, Inc.

*(Environment News Service- 10/28/04)*

### NEW JERSEY SCHOOL BUSES GET AN EXHAUSTIVE MAKEOVER

In New Jersey, school buses are being retrofitted to reduce diesel exhaust pollution.

At the Clinton Avenue School in Newark (DEP) Commissioner Bradley Campbell announced that Public Service Enterprise Group Incorporated (PSEG) has joined forces with

## NJ REGULATORY UPDATES (Continued)

Camptown Bus Lines to install retrofit devices on up to 46 school buses in Newark.

The retrofits will reduce particulate emissions by over 50 percent. Work on 14 buses has been completed and the remainder will be done by year end.

PSEG is contributing \$100,000 to retrofit the 46 buses owned and operated by Camptown Bus Lines. MJ Bradley Associates of Cambridge, Massachusetts developed and is managing the retrofit project.

To learn more about diesel emissions and public health, visit DEP's Web site: [www.stopthe-soot.org](http://www.stopthe-soot.org)

*(Environment News Service - 11/1/04)*

### DEP LIMITS USE OF ISRA LETTERS OF NON-APPLICABILITY

DEP recently announced that it will no longer process certain applications for Letters of non-Applicability ("LNA") with respect to compliance with the Industrial Site Recovery Act ("ISRA"), N.J.S.A. 13:1 k-6 et seq., for transactions or properties that are "unmistakably exempt" from ISRA. Obtaining an LNA has become a common requirement of lenders and other commercial entities in New Jersey, often without regard to actual use of the subject property. DEP receives over 5,000 applications for ISRA LNAs each year, the majority of which, according to the agency, address properties or transactions that clearly exempt from ISRA. Examples of transactions for businesses "unmistakably exempt" from ISRA include refinancing

of a mortgage or loan, obtaining a construction loan, and transactions involving residential properties, undeveloped land, retail gasoline stations, automobile repair shops, and dry cleaners. Applications for an LNA submitted contrary to this policy will be returned to the applicant unprocessed.

*(Riker Danzig Env. Update- 10/04)*

### DEP DATA MINER

In late spring, the DEP launched a new format for its Data Miner website. The Data Miner can be used to obtain information such as air quality permitting and reporting, a list of certified laboratories, information on a particular site or information on compliance and enforcement, and the like. Thus, the Data Miner, which is used to obtain charts and reports, can be used in conjunction with i-MapNJ Dep, which provides an interactive mapping program. As part of the DEP's Open Public Records website, The Data Miner provides a variety of reports and searching options with up to the minute results. According to DEP, "the information contained in this site is the best available according to the procedures and standards of each of the contributing programs." The Data Miner website can be accessed at: [www.nj.gov/dep/opra.online.html](http://www.nj.gov/dep/opra.online.html)

*(Riker Danzig Env. Update- 10/04)*

### NJ TIGHTENS LIMITS ON ARSENIC, MERCURY

New Jersey will dramatically toughen the legal limits on arsenic in drinking water and on

mercury emissions from power plants. The state Department of Environmental Protection called pollution rules, formally adopted on November 4, the nation's strongest.

The 10 coal-fired power plants in the state must cut mercury emissions by 90 percent before December 2007. Municipal trash incinerators have seven years to cut mercury emissions back to 95 percent of what was measured in 1990.

Arsenic in drinking water must stay below five parts per billion, half the newest federal standard for clean water.

"If New Jersey's mercury rules were enacted nationally, annual emissions from power plant alone would decline from approximately 48 tons to about five tons," DEP Commissioner Bradley Campbell said.

Several methods exist to allow water to be cleaned beyond the limits set by the federal government, he said.

More than 600 public water systems and 900 additional water systems are monitored for arsenic. New Jersey also requires private wells to be tested when homes are sold.

DEP officials estimate that 135 water systems will not meet the new standard, which is to go into effect in January 2006.

Arsenic is found naturally throughout New Jersey, particularly in the north, where it can leach out of rock formations.

Mercury poisoning comes from eating contaminated fish. The metal accumulates in water.

*(Philadelphia Inquirer- 11/5/04)*

## PENNSYLVANIA BULLETIN NOTICES

### FINAL TECHNICAL GUIDANCE:

Procedures for the Approval and Accreditation of Laboratories in the Commonwealth of Pennsylvania Utilizing the National Environmental Laboratory Accreditation Conference (NELAC) Standard.

Effective Date - 9/25/04

### NOTICE OF INTENT TO REMOVE:

Deep Mine Safety Program Guidance Manual

Effective Date - 10/2/04

### DRAFT TECHNICAL GUIDANCE- SUBSTANTIVE REVISION:

Conventional Bonding for Land Reclamation - Coal.

### FINAL TECHNICAL GUIDANCE:

2005 Environmental Education Grants Program Manual and Forms.

Effective Date - 10/1/04

### DRAFT TECHNICAL GUIDANCE- SUBSTANTIVE REVISION:

Bureau of Radiation Protection Compliance and Enforcement Policy

### DEP SEEKING COMMENTS ON GENERAL PERMIT FOR EXPANDING MUNICIPAL YARDWASTE COMPOST FACILITIES

DEP published a notice in the October 30 Pennsylvania Bulletin for a general permit to expand existing municipal operated compost facilities from the existing approval of 5 acres to a maximum of 15 acres.

### DRAFT TECHNICAL GUIDANCE - Substantive Revision

Turbidity Reporting Instructions for Public Water Systems Using Filtered Surface Water or Groundwater Under the Influence of Surface Water (GUDI) Sources.

### DRAFT TECHNICAL GUIDANCE:

Proposed Revision to the Agricultural Land Preservation Policy.



**FEDERAL REGISTER NOTICES**  
<http://www.epagov/homepage/fedrgstr>

**Environmental Protection Agency**

National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines: Final Rule; stay.  
*(Federal Register - 8/18/04)*

**Environmental Protection Agency**

Effluent Limitations Guidelines and New Source Performance Standards for the Concentrated Aquatic Animal Production Point Source Category; Final Rule.  
*(Federal Register - 8/23/04)*

**Environmental Protection Agency**

Withdrawal of Direct Final Rule; National Primary Drinking Water Regulations: Analytical Method for Uranium: Withdrawal of Direct Final Rule.  
*(Federal Register - 8/25/04)*

**Environmental Protection Agency**

Standards and Practices for All Appropriate Inquiries and Notice of Public Meeting To Discuss Standards and Practices for All Appropriate Inquiries; Proposed Rules.  
*(Federal Register - 8/26/04)*

**Environmental Protection Agency**

Approval and Promulgation of Implementation Plans; New Jersey; Revised Motor Vehicle Transportation Conformity Budgets: Final Rule.  
*(Federal Register - 8/30/04)*

**Environmental Protection Agency**

Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania; Federally Enforceable State Operating Permit Program for Allegheny County.  
*(Federal Register - 8/30/04)*

**Environmental Protection Agency**

Storage of PCB Articles for Reuse; Availability of Supplemental Response to Comments Document.  
*(Federal Register - 9/7/04)*

**Environmental Protection Agency**

Effluent Limitations Guidelines and New Source Performance Standards for the Meat and Poultry Products Point Source Category; Final Rule.  
*(Federal Register - 9/8/04)*

**Environmental Protection Agency**

Test Procedures for Testing Highway and Nonroad Engines and Omnibus Technical Amendments; Proposed Rule.  
*(Federal Register - 9/10/04)*

**Environmental Protection Agency**

National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; Final Rule.  
*(Federal Register - 9/13/04)*

**Environmental Protection Agency**

Air Quality Classifications for the 8-Hour Ozone National Ambient Air Quality Standards: Final Rule.  
*(Federal Register - 9/22/04)*

**Environmental Protection Agency**

Papers Addressing Scientific Issues in the Risk Assessment of Metals: Notice of availability. The issue papers are available primarily via the Internet on the Risk Assessment Forum's Web page <http://cfpub.epa.gov/ncea/raf/recordisplay.cfm?>  
*(Federal Register - 10/4/04)*

**Environmental Protection Agency**

National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks: Proposed Rule; Amendments  
*(Federal Register - 10/13/04)*

**Environmental Protection Agency**

Air Quality Criteria for Particulate Matter: Notice of Availability of Final Document  
*(Federal Register - 10/29/04)*

## SERVICES & PRODUCTS



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### PROCESSING FACILITIES

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- Recycling Facilities
- Transfer Stations
- Industrial Metals Processing
- Residual & Hazardous Waste Facilities
- Landfills

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### ENVIRONMENTAL SURVEYS

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- Phases 1 - 4 Environmental Surveys
- Field Investigations
- Computer Regulatory Database Checking
- Field Analytical Testing (Volatiles, Metals, PCB's, Gasoline, and Oil Compounds)
- Remedial Action Plans
- Asbestos Testing & Abatement
- Lead-Based Paint Testing & Abatement
- Feasibility Studies
- Storm Water Management

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### INDOOR AIR QUALITY

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- Microbial Investigations - Mold & Bacteria
- Remedial Evaluations
- Oversight
- Remediation Services
- Expert Witness

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### OTHER SERVICES

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- Training Programs
- Contingency Plans
- Source Reduction
- Waste Minimization
- Superfund Project Management
- Expert Witness Testimony

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### SITE REUSE

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- PA Land Recycling
- Brownfields
- NJ ISRA
- Site Redevelopment Plans

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### REMEDIATION

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- Groundwater Recovery/Treatment
- Waste/Soil Excavation
- Soil Vapor Extraction
- Bioremediation
- Liquid and Vapor Phase Carbon Treatment
- In Situ Thermal Desorption
- Tank Upgrading and Removals

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### AIR EMISSIONS

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- Emissions Permitting and Inventories
- Emissions Testing
- Odor Control Studies
- Dispersion Modeling

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### CONCEPT THROUGH START-UP

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- Design and Project Management
- Permitting
- Construction and Construction QA/QC
- Start-up Operations Services
- Operations and Maintenance

Call us for more information at 800-725-0593 or visit our Web Site at <http://RTENV.COM>

**RT Environmental Services, Inc.**



# RT Environmental Services, Inc.

## TRIPLE CROWN – BUILDING SERVICES TRAINING SEMINAR

**RT announces the "Triple Crown" package of awareness for building and property managers, engineers, and maintenance professionals.**

RT Environmental Services is pleased to announce convenient schedules for mold, asbestos containing material (ACM) and lead based paint (LBP) awareness training seminars at our King of Prussia headquarters. Through the years, we have found that the winter is the best time to conduct such training as "outdoor tasks" are minimal, as compared to spring, summer and fall periods.

To simplify training program for building maintenance and property management trades, we are offering the following convenient schedule ...

### Training Sessions: January 20, 2005 and February 16, 2005

You may select from the following training options:

- **Mold Awareness Training** (7:45 a.m. - 9:45 a.m.) - \$35
- **ACM Awareness Training** (10:00 a.m. - Noon) - \$35
- **LBP Awareness Training** (1:00 p.m. - 3:00 p.m.) - \$35
- **FULL PACKAGE:** All three training sessions plus lunch- \$65

# NEW

*BOMA/AAGP/TRISTATE members may deduct \$5 from the fee for individual seminars or \$10.00 for the full seminar package. Group discounts are available, for those with 5 or more professionals attending the seminar from the same organization.*

*Training Sessions are at our Corporate Office - Seminar Center: 215 W Church Rd., King of Prussia, PA 19464*

As in the past, our seminars will give you practical advice, including recommendations for best management practices to be referenced or included in tenant leases, case studies and pictures of building services projects right here in the Philadelphia area, demonstrations of "tools of the trade", and plenty of time will be available to ask questions and respond to comments.

Now, more than ever, smart property managers have learned that building professionals are the "first line of defense", in keeping building environmental issues small, when complaints arise. All three awareness training programs provide practical advice and guidance on which environmental issues building professionals can handle themselves, and which should be handled by outside contractors or professionals. In the Greater Philadelphia region RT has already trained more 400 building professionals in the last year on mold awareness alone, and due to a number of recent requests, we are pleased to offer this three topic building environmental seminar package this year.

\*\*\*\*\*

**Please complete the following** (Please Print or Type):

**Name:** \_\_\_\_\_ **Phone:** \_\_\_\_\_  
**Company:** \_\_\_\_\_ **Fax:** \_\_\_\_\_  
**Address:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Number attending:** \_\_\_\_\_

**Please choose Training Date:**  **January 20, 2005**  **February 16, 2005**

**Please choose session and circle amount:**

**Mold Awareness Training Session - \$35.00/\$30.00\***       **LBP Awareness Training Sessions - \$35.00/\$30.00\***  
 **ACM Awareness Training Session - \$35.00/\$30.00\***       **All 3 sessions plus lunch - \$65.00/\$50.00\***

Please check which member organization you belong:  **BOMA**  **AAGP**  **TriState**

**\*Membership discounted price** (Payment will be processed after verification of membership)

**\*\*For Group Discounts (5 or more professionals from the same company) - Please Call 610-265-1510 x24.**

**Payment Method:**  Check  Master Card  VISA  American Express  
 Signature \_\_\_\_\_ Card# \_\_\_\_\_ Exp Date \_\_\_\_\_

Please mail this registration form and payment or fax, if paying by credit card, to:

**RT Environmental Services, Inc.**

215 W. Church Rd  
King of Prussia, PA 19406  
Attention: Kathy O'Connor

Phone: 610-2651510 x24 - Fax: 610-265-0687

Directions and Confirmation will be sent after processing your registration.



## KEY HIGHLIGHTS

### FEDERAL UPDATES

- Solid Waste Rule - Pg. 9
- Air Conditioner Efficiency Standards - Pg. 9
- New Arsenic Risk Value - Pg. 10
- SSO/CSO Discharges - Pg. 11

### PA UPDATES

- Small Business Matching Grant - Pg. 4
- Lab Accreditation - Pg. 4
- Clean Electricity - Pg. 4

### NJ REGULATORY UPDATES

- Carbon Dioxide as Air Contaminant - Pg. 14
- UST Violation Crackdown - Pg. 14
- Mercury Bill - Pg. 15
- Clay Mine to Bird Habitat - Pg. 15

### TECHNOLOGY UPDATES

- Riverbank Soils Filtration - Pg. 5
- Oil Industry & Vapor Intrusion - Pg. 6
- Glaciers Melting Faster - Pg. 6
- Arsenic Treatment - Pg. 7
- Solid Waste From Renovation - Pg. 7

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