The RT Review

The Latest on Environmental Issues From Your Solution-Oriented Environmental Services Firm

• Environmental Engineers & Scientists • Geologists • Remedial Contractors



NJDEP ADOPTS CLEAN FILL CONCRETE SAMPLING REQUIREMENTS

NJDEP has recently issued guidance for sampling of concrete demolition materials. PCB impacted concrete was placed at a number of central New Jersey sites from an Edison, NJ demolition project and costly cleanups resulted.

New Jersey's Guidance for the Sampling and Analysis of Concrete Designated for Recycling requires that:

- Only uncontaminated concrete will qualify for recycling, although some minimally contaminated concrete may qualify for certain beneficial uses with New Jersey Department of Environmental Protection (NJDEP) approval.
- All sampling of concrete must take place at the site of generation.
- Materials containing contamination entirely below the NJDEP's Residential Direct Contact Soil Cleanup Criteria (RDC-SCC) shall be considered eligible for direct unrestricted use on or off site in compliance with all other requirements.
- Materials with contamination above the RDCSCC are considered solid wastes. These materials do not qualify for direct reuse on or off the site of generation without NJDEP approval.
- Sampling should be biased toward visible staining or other indication of potential contamination.
 - Sampling frequency shall be as follows: Less than, or first 100 cubic yards (cy)
 - 1 Composite Sample per each 100 cy 400 cy - 2000 cy
 - 1 Composite Sample per ea. next 200 cy Over 2000 cy
 - 1 Composite Sample per ea. next 500 cy
- Concrete must be analyzed for PCB's and PAHs at all sites.

RT's principal Gary Brown, made suggestions to NJDEP on how to follow the PADEP Clean Fill Program model, but work with NJDEP procedures for sampling and contaminant limits. This is an important step forward by NJDEP in restoring confidence in the use of recycled materials in New Jersey.

Should you have any questions, call Joe Lang or Justin Lauterbach at RT's New Jersey office.

MORE BROWNFIELDS PROJECTS TAKING CENTER STAGE ... RT EXPANDS STAFF

To accommodate population growth in New Jersey and Pennsylvania, Brownfields sites are receiving constant developer and redeveloper attention. When we count the number of new projects, Brownfields services are tracking ahead of all other project categories at our firm. The trend to redevelop Brownfields sites is not limited to our core industrial areas any longer, but has expanded to suburban areas such as Sellersville, Pennsylvania, where RT has two projects in progress, and, such locations as Cranbury and Holmdel, New Jersey, where changing industrial markets have caused lack of need for utilization of 1950s and 1960s first- generation corporate campuses, now meeting the eye of redevelopers.

With both Pennsylvania and New Jersey having strong sprawl control regulations and smart growth incentives, the type and scale of redevelopment projects has changed, necessitating higher level project planning and site investigation work, and RT is responding.

Since the first of the year, RT has added the following senior staff:

• <u>Glennon Graham</u> joins RT's King of Prussia headquarters, as a Professional



Geologist. Mr. Graham has in-depth Pennsylvania and New Jersey experience, and has NJDEP Subsurface Evaluator and Tank Closure certifications. He has designed and implemented extensive soil and ground-

water sampling programs, at sites throughout the northeastern United States. In addition to in-depth Pennsylvania and New Jersey experience, he has managed projects in New York, Delaware, and Virginia.

• Ernest Risha has been added to RT's New Jersey staff to manage the investigation of remedial work, principally at large-

scale NJ ISRA sites. Mr. Risha has 18 years of in-depth experience in applying the Technical Requirements for Site Remediation, NJDEP's investigation and remedial action "bible" at a variety of sites throughout the state. He is currently working on large-scale projects in Holmdel, Cranbury, and Beesley's Point. He will also be coordinating field work for South Jersey's largest redevelopment project in Bellmawr, highlighted in previous RT Reviews.

• <u>Craig Herr</u> has also rejoined RT as Project Geologist. Craig is already managing an increased number of south central Pennsylvania remediation sites, including



solvent impacted and petroleum impacted groundwater remediation sites, and, large scale historic pesticide contamination sites being redeveloped into residential properties. He is also working on a

large-scale expert assignment, wherein historic releases from a series of roadway service areas are being examined to determine insurance policy reimbursement eligibility. Craig also recently was awarded his Professional Geologist license in Pennsylvania.

We at RT continue to evaluate all project mix to assure that we can meet client project demand, and brownfields redevelopment site work with their strongest area of expansion. RT is very pleased to have all three talented individuals working on our

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MORE BROWNFIELDS PROJECTS TAKING CENTER STAGE . . . RT EXPANDS STAFF (continued from page 1)

team as more and more clients bring redevelopment projects to us in 2006 and beyond.

-- Gary Brown

JUSTIN LAUTERBACH PROMOTED TO ASSOCIATE

Justin Lauterbach, General Manager of RT's New Jersey office, has been promoted



to Associate of the firm. Associates have increased corporate responsibilities, and are considered by RT to be future officers, helping to promote upward growth as the firm expands.

Justin is an Allegheny College graduate, and has attracted many new professionals to the firm, as well as managed major multi-site projects, in particular, those for a major pharmacy retail chain, who has given much attention to redeveloping Brownfields site locations in Pennsylvania and New Jersey. Justin's strong points are understanding

clients' needs, understanding their frame of reference, and making appropriate recommendations on how to proceed to redevelop sites, either in Pennsylvania or New Jersey. Justin is General Manager of RT's New Jersey office. All of us at RT congratulate Justin on this promotion.

WALTER HUNGARTER PROMOTED TO GENERAL MANAGER OF RT'S KING OF PRUSSIA OFFICE

Walter Hungarter has been promoted to General Manager of RT's King of Prussia



headquarters office. Walter has managed major RT projects, including the Henderson Road Superfund site project. Our King of Prussia Engineering, Hydrogeology, and Remediation Groups all report to Walter

as the office expands in response to more Brownfields projects. We congratulate Walter on this promotion.

EPA POLYCHLORINATED BIPHENYL (PCB) SITE REVITALIZATION GUIDANCE UNDER THE TOXIC SUBSTANCES CONTROL ACT (TSCA)

EPA has issued a Guide for complying with the Toxic Substance Control Act (TSCA) regulations for the cleanup and disposal of polychlorinated biphenyl (PCB) contamination. The Guide focuses on the transfer in ownership of contaminated real property, typically at Brownfields sites. The Guide seeks to provide information to expedite cleanup efforts of contaminated properties and result in increased opportunities for economic redevelopment of land that otherwise would remain barren and unsightly. The Guidance document, "Polychlorinated Biphenyl (PCB) Site Revitalization Guidance Under the Toxic Substances Control Act (TSCA)," will assist individuals in navigating the TSCA PCB regulations in 40 CFR part 761 for relevant PCB cleanup and disposal requirements. It should be useful to individuals who are planning or are engaged in PCB remediation activities (e.g., the redevelopment of sites with PCB contamination), as well as State environmental officials who are implementing State response programs, in complying with the PCB waste management requirements promulgated under section 6(e) of TSCA. RT is already using new sampling procedures in the Guide, at a Philadelphia redevelopment site. There are new opportunities available for redeveloping PCB impacted sites. The Guide is noticed in the April 4, 2006 Federal Register. Call Gary Brown or Larry Bily at RT for more information at 800-725-

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A Developer's Perspective

DON'T MAKE REAL ESTATE DEALS WITHOUT CHECKING ENVIRONMENTAL ISSUES

Bernard K. Danzansky knows the importance of environmental inspections. He runs into environmental issues so often in the course of developing shopping centers anchored by supermarkets that he wouldn't go forward on a deal without an inspection.

"We do it for our own protection," said Danzansky, president of Fort Lauderdale-based Equity Ventures Realty Inc. "But it's a financial issue, too. We want to know what we have to deal with, and we won't close if the land has environmental issues that can't be remedied without having the project remain economically viable."

So Danzansky spends from \$2,500 to \$7,000 per deal to conduct a phase one environmental assessment, a thorough investigation into the current and past uses of a property. Experts say that's a wise decision.

"Environmental liability is retroactive, and it's joint and several," said Kerry Barsh, an attorney and co-chair of the environmental and land development group at Greenberg Traurig LLP in Miami. "And the liability associated with the property can be more than the value of the property itself."

Under applicable federal and state laws, the buyer of property with environmental problems can be held liable for the remediation, or cleanup, of that property even if the buyer had nothing to do with the contamination.

Since remediation isn't cheap – cleanup costs can range from a few thousand dollars up to the millions – environmental issues are something all real estate buyers need to become more familiar with.

Environmental issues can pop up in nearly any type of commercial deal, and they can arise in residential transactions, too.

Gas stations are a common source of problems because of the potential for spills. Strip malls with dry cleaning stores also are suspect since it's not unusual to find dry cleaning solvent leaks in the soil and groundwater nearby.

Even raw land can have problems. It could have been used as a dump site or might contain a leaking underground storage tank. Golf courses and nurseries – not the types of land you'd normally expect a problem with – need to be checked out before they're converted into residential properties. That's because they can have arsenic contamination from the pesticides used to keep them green, said Chris Herin, an environmental consultant with GeoSyntec Consultants Inc. in Boca Raton.

Major environmental problems are less common in residential property transactions, but mold, radon, asbestos and lead paint are just a few of the things that can arise in what would otherwise be a simple home purchase.

That's why experts recommend erring on the side of caution.

"If there was a release of hazardous materials that occurred – even one you knew nothing about when you purchased the property – then you purchased that problem," said Mary Smallwood, an environmental attorney with Ruden McClosky in Tallahassee.

Both federal and state environmental laws affect real estate transactions. The main federal law is the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as Superfund. This law gave the government far-reaching powers to protect the public and environment from the release of hazardous substances. CERCLA established rules for closed or abandoned hazardous waste sites and made those responsible for any releases liable.

Under Superfund, "responsible parties" are held liable for cleaning up properties contamination. environmental "Responsible parties" can mean not only the current owner of a property, but also certain past owners. Although the law contains certain defenses that purchasers can attempt to hang their hats on, the best way to protect oneself is to hire a qualified inspector to conduct a phase one assessment before closing on a property. This will include a visual inspection of the property and surrounding areas plus a review of building permits, photographs, fire insurance maps, city maps, topographic maps and environmental databases. The goal is to discover any past uses of the property that may create environmental risks.

One major limitation of a phase one assessment: It doesn't include inspections for asbestos, radon, lead paint, underground storage tanks or mold. Those inspections must be conducted separately and at additional cost.

If the initial inspection indicates problems, or if the property is high risk, a phase two assessment should be conducted. With this inspection, samples of air, water and soil from the site are analyzed to see if there is any contamination. Herin said these inspections cost \$3,000 and up. So what happens if an environmental problem arises in the course of your deal? Should you walk?

That depends.

Danzansky of Equity Ventures said because of Florida's strong commercial market, it's difficult to get sellers to assume responsibility for environmental problems. So it becomes a business decision for the buyer: Do the numbers still work on a deal if you factor in the cost of cleanup? For Danzansky, most of the time, they do.

But buyers don't have to bear the risk alone. A few years ago, Danzansky was planning to build a retail center on some land that his tests indicated might have underground oil tanks. He wanted to go ahead on the deal, but didn't want to risk liability. So he purchased environmental liability insurance – a pricey alternative but one that gave him peace of mind.

"The money was well spent," he said. "We all slept peacefully at night knowing that there was an AAA-rated insurance company to foot the bill, if something unusual came up in construction.

Hank Cohen, a developer and general contractor based in Delray Beach, often has to deal with asbestos in the course of his work renovating multifamily properties. He said removing the asbestos can double his demolition costs – and the removal is not covered by insurance. So he protects himself by having an asbestos inspection on all the properties he renovates, especially important for buildings built before 1980 which Cohen said have a 50-50 chance of containing asbestos.

Finding a qualified consultant to conduct your environmental due diligence is key to minimizing your liability. Get recommendations from other real estate owners or investors, or from an environmental attorney. The consultant should be local so he or she is familiar with local issues.

If you're not familiar with environmental laws, hire a competent attorney to guide you through the process. And then heed the legal advice.

"Base your decision regarding the purchase on the professional opinion of a consultant and remediator," said Alon Levin, vice president of operations for Fort Lauderdale-based Decon Environmental & Engineering Inc., an environmental remediation contractor. "If you don't and you assume the wrong thing, it can come back to haunt you."

(South Florida Sun Sentinel – 5/29/06)

PENNSYLVANIA DEMAND FOR HYBRID VEHICLE REBATES OUTSTRIPS FUNDING

Pennsylvania is encouraging hybrid electric and alternative fuel vehicles by offering rebates to motorists who buy and operate them in the state, but the program has been so successful, the state was expected to run out of rebate money sometime in April.

Department of Environmental Protection (DEP) Secretary Kathleen McGinty said Pennsylvania already has awarded more than \$1.3 million in rebates from the \$1.5 million allotted for the program for the 2005-2006 fiscal year. Another \$1 million will become available for the fiscal year beginning July 1.

Because buyers have six months from the time of the purchase to apply for the rebates, people buying hybrid electric and alternative fuel vehicles after the current funding runs out still will be able to apply for rebates when the program reopens.

"Demand for these rebates clearly shows the public is interested in vehicles that achieve higher fuel efficiency standards and employ alternative fuel technologies," McGinty said.

Alternative fuels include compressed natural gas, liquefied natural gas, liquid propane gas, ethanol, methanol, hydrogen, coal-derived liquid fuels and fuels derived from biological materials.

The use of these fuels offers an alternative to conventional transportation fuels that come primarily from petroleum imported from foreign countries, more desirable now that increasing energy prices are impacting consumers, businesses and local governments.

"With each of us demanding low-emissions cars that get better gas mileage, we can lessen our dependence on foreign oil and improve the environment at the same time," McGinty said. "I am grateful that Pennsylvania can offer this rebate program again in July."

DEP will not accept rebate forms from the time current funding runs out until the program reopens. At that time, DEP will determine the amount of the rebate.

(ENS - 3/13/06)

STATE LAWSUIT MAY BE LEGAL TEST FOR VALIDITY OF VAPOR INTRUSION MODELS

A recent lawsuit filed in a Pennsylvania state court where the plaintiffs are seeking damages for vapor intrusion and other contamination is raising legal questions about how private consultants and state regulators are utilizing a controversial model that is the basis for EPA's and other states' vapor intrusion guides.

"This is an example of how vapor intrusion may be handled by the defense to contest a model that has been used," one real estate attorney says.

One source says many environmental consultants who conduct tests on potentially contaminated sites often alter the model highlighted in

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the draft EPA vapor intrusion guide, known as the Johnson-Ettinger model, to take into account local guidances and more site-specific measures, such as the geology of the surrounding land. Because such alterations are common, the strategy posed by the defendants in the Pennsylvania case could be used in similar suits in which a plaintiff is seeking damages for vapor intrusion.

Recently the Johnson-Ettinger model has come under criticism from EPA scientists at the National Exposure research Laboratory, particularly because the data entered into the model does not necessarily take into account site-specific details, such as indoor air concentrations.

Vapor intrusion results when contaminants, including leaked fuel and other harmful chemicals, are released into the air from polluted land or groundwater. Such vapors can rise into the air and contaminate buildings through vents, open windows and doors, and porous concrete. The 2002 draft EPA guide for measuring and screening for vapor intrusion has come under criticism by state officials, environmentalists and others who have argued the EPA guide does not take into account enough environmental diversity, and therefore has spurred regulators and others to draft more state and region-specific guides (see related story below).

A judge in the Montgomery County, PA, court March 20 was to hear the defendants' motion to exclude testimony by an environmental consultant working for the plaintiffs in the case, Susan B. Fralick Ball, et al., v. Bayard Pump & Tank, et al. The plaintiffs – who all live near a gas station in Blue Bell, PA, where petroleum leaked from a storage tank – are seeking damages as a result of groundwater contamination and vapor intrusion.

The defendants' filing argues the consultant's assessment of indoor air was based on a new model developed using "screening" steps highlighted in the draft EPA guide and the Pennsylvania Department of Environmental Protection vapor intrusion document, and an attenuation factor to estimate indoor air concentration. The defendants also argue that the consultant used inadequate data that is "not generally accepted in the relevant scientific community."

According to the defense's filings the consultant was attempting to reconstruct what the indoor concentrations of certain chemicals "might have been" following the 1998 gasoline release at the facility. The motion also says the consultant recommended on-site testing of indoor air and soil gas immediately below the near by buildings, but that the plaintiffs did not "pursue either of the options available for assessing vapor intrusion at this site using actual measurements, but instead resorted to {the consultant's} esoteric modeling approach."

Minnesota, Maine and Oregon have drafted guides that specifically address vapor intrusion that results from petroleum-contaminated sites, but most guides primarily address chlorinated solvents common to Superfund sites. One source

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says that because it is widely believed that petroleum breaks down over time, it has been less of a concern for vapor intrusion than chlorinated solvents, such as trichloroethylene. But because petroleum contains benzene – a known carcinogen – releases of petroleum have become of increasing concern for vapor intrusion.

(Superfund Report – 3/13/06)

DEP PUBLISHES STORMWATER BEST MANAGEMENT PRACTICES MANUAL

By way of background, NPDES stormwater permits are now required for construction activities involving the disturbance of one acre or more (including earth disturbances less than one acre that occur as part of a larger common plan of development or sale of more than one acre). In Pennsylvania, these NPDES permits require the development and execution of a Post-Construction Stormwater Management Plan in addition to an Erosion and Sediment Control Plan. A Stormwater Management Plan also may be required under a municipal ordinance adopted pursuant to the Pennsylvania Stormwater Management Act (Act 167) program. In recognition of the need for guidance and consistency in the development of stormwater management plans, the Pennsylvania Department of Environmental Protection ("DEP") organized a committee to develop a manual setting forth "best management practices ("BMPs") to control the volume, rate and water quality of post-construction stormwater runoff so as to protect and maintain the chemical, physical and biological properties of waters of the Commonwealth."

On April 15, 2006, the DEP published the final draft of the Pennsylvania Stormwater Best Management Practices Manual. The final draft of the manual provides guidance for stormwater management utilizing BMPs in Pennsylvania, with an emphasis on preserving on-site and offsite pre-construction hydraulic conditions. The draft manual is intended to be a resource for all persons conducting or planning to conduct activities that require a written Post-Construction Stormwater Management Plants and describes many structural and non-structural techniques and technologies that have been identified as BMPs.

The draft manual is available on the DEP's website - http://www.dep.state.pa.us/. From the DEP's home page, under "Water Topics," choose "Stormwater Management," then click on "General Information," then click on "Stormwater Oversight Committee."

(PUCA Infofax - 4/21/06)

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PENNSYLVANIA MAKES ECOTERRORISM A CRIMINAL OFFENSE

Pennsylvania has passed a law that amends the state's criminal code to include the offense of ecoterrorism.

Pennsylvania Governor Edward Rendell said the state will be better able to protect people from intimidation and natural resources from unlawful acts of desecration with the new offense on the books. He signed the bill into law in April and it will take effect in mid-June.

Upon signing the bill, Rendell said, "In the last decade our nation has witnessed an increasing number of costly and dangerous acts of destruction of property – in the name of animal rights or environmental protection. Most of these protests re lodged against pharmaceutical and other companies are in the business of developing new medicines to provide treatments and cures for deadly diseases."

"Those who oppose animal research certainly have the right to use the political process to express their views," the governor said. "But if they intentionally destroy property as part of their protest they should be charged accordingly for any property crimes they have committed. These persons should receive additional punishment because their conduct is intended to intimidate and stop lawful activities."

"Destroying property, intimidating Pennsylvania residents or illegally confiscating animals as a way of political protest will not be tolerated in Pennsylvania," said the governor.

In Pennsylvania, ecoterrorism now is defined as a person committing one of a number of "specified offenses against property" with the intent to intimidate or coerce another individual lawfully participating in an activity which involves animals, plants, or natural resources.

Specified offenses include certain arson offenses, causing or risking catastrophe, criminal mischief, institutional vandalism, agricultural vandalism, agricultural crop destruction, burglary if committed in order to commit another specified offense, criminal trespass if the crime is committed in order to threaten or terrorize the owner or occupant of the premises.

(Environment News Service - 4/20/06)

PENNSYLVANIA SPENDS \$20 MILLION ON INNOVATIVE RECYCLING PROJECTS

The government of Pennsylvania will continue supporting municipal recycling programs with 116 new grants totaling \$20 million. The state grants reimburse local governments for the cost of municipal recycling and composting programs.

The projects are projected contribute to the state's economic growth and provide access to recycling services for some 10 million commonwealth residents

"Recycling is a growth industry with many

kinds of business opportunities, from waste management to manufacturing to inventing new technologies," said Governor Ed Rendell. "These grants give residents greater access to waste reduction and recycling opportunities, helping to ensure a health environment and strong economy.

Some of the larger grants are, for example, the \$479,693 that will go to Cumberland County for drop-off recycling and yard waste composting efforts and the \$412,000 that the City of Erie has been granted for yard waste collection and composting.

Other cities, counties and townships will receive amounts that vary by the size of their populations for food waste composting, leaf waste composting, commercial recycling, collection of paper for livestock bedding, "pay-as-youthrow" recycling, and many curbside and drop-off recycling programs.

Pennsylvania's recycling program, created under Act 101 of 1988, mandates recycling in the state's larger municipalities and requires counties to develop municipal waste management plans.

"This money provides much-needed funding for communities that have mandated recycling programs," Environmental Protection Secretary Kathleen McGinty said. "These grants also ensure that recycling continues to be a strong contributor to Pennsylvania's economy."

Pennsylvania's recycling industry is profitable. More than 3,247 recycling and reuse businesses and organizations generate more than \$18.4 billion in gross annual sales and provide jobs for more than 81,322 employees at an annual payroll of approximately \$2.9 billion.

These businesses add more than \$305 million in taxes to the state treasury.

In 2004, nearly 4.8 million tons of municipal waste was recovered in Pennsylvania. The economic value of remaking that waste into new and useful products exceeded \$113 million.

Communities avoided more than \$259 million in disposal costs based on the estimated statewide average disposal cost of \$54 per ton.

Pennsylvania's recycling efforts also save energy, reduce air and water pollution, and limit the need for virgin materials in manufacturing.

McGinty points to data showing that by recycling more than one million tons of steel cans, appliances and similar materials, Pennsylvania industries saved almost 1.3 million tons of iron ore, 718,460 tons of coal and 61,582 tons of limestone.

Through recycling newspapers as well as office and mixed paper, the state saved the equivalent of 8.2 million trees. On average, a live tree removes 60 pounds per year of air pollution from the environment.

(Environment News Service – 5/19/06)

PENNSYLVANIA MOVES AHEAD WITH STATE-SPECIFIC MERCURY CONTROL PLAN

Pennsylvania has received approval from the

state Environmental Quality Board to move forward with a state-specific mercury-reduction proposal that protects the market for bituminous coal while ensuring vastly greater protections to improve the environment and keep residents health and safe. The state-specific plan would supersede a weaker plan proposed by the federal government.

According to PA Governor Rendell, "The federal rule is bad for the environment and bad for business. Unless we change course, Pennsylvanians face continued exposure to dangerous levels of mercury and our coal industry faces significant economic harm because of the unfair market barriers included in the federal mercury rule."

Pennsylvania has filed several lawsuits challenging the EPA's mercury rule for coal-fired power plants. The cases also challenge EPA's subcategorization of coal types, which encourages fuel switching away from bituminous coal mined in eastern states, like Pennsylvania, in favor of coal mined in the western U.S.

Upon completion of the public comment phase for the state's proposal, DEP will present a final plan for EQB consideration by October. Pennsylvania must submit to EPA by November 17 a plan that describes how the state will implement and enforce the federal emissions guidelines or its own more protective standards.

The DEP will also prepare for the board and mercury stakeholders a document that addresses public comments and details the formation of the state-specific rule. EQB is a 20-member, independent panel that reviews all of DEP's regulations

Pennsylvania's state-specific proposal was crafted after an enhanced stakeholder process that featured a diverse group of public and private individuals who met four times to examine technology, emission control levels, testing, monitoring, record keeping and reporting, compliance schedules, health effects, power generation capacity, infrastructure and economic competitiveness. Pennsylvania's plan achieves the following:

- Preserves market share for bituminous coal by presuming compliance with emission standards for electric generating units that burn 100 percent bituminous coal with advanced air pollution control technologies.
- Maximizes mercury reduction co-benefits that can be achieved under the federal Clean Air Interstate Rule. Mercury-specific controls are not mandated.
- Achieves at least 90 percent mercury reduction by 2015.
- Requires all facilities to meet an annual mercury emissions cap and prohibits mercury emissions trading that may create toxic "hot spots" of contamination.

(Environmental Tip of the Week – 5/22/06)

PA ENACTS LEGISLATION RESTRICTING USE OF EMINENT DOMAIN

On April 25, the Pennsylvania Senate passed legislation, the Property Rights Protection Act, which limits, but does not prohibit, Commonwealth and local government ability to condemn private property for private economic development. Governor Rendell signed the bill into law on May 4. Pennsylvania thus became the 18th state to pass legislation restricting the use of eminent domain after the U.S. Supreme Court's controversial 2005 ruling in Kelo v. New London, where the Court upheld the condemnation of residences as part of a private redevelopment project by interpreting the Fifth Amendment to encompass takings for private economic development as well as for public projects when furthering an urban redevelopment plan. Pennsylvania's legislation tightens the definition of "blight" (a prerequisite for condemning property and transferring it to another private party) so that an area must now meet certain objective criteria before satisfying the new definition. Specific criteria include a showing that the area is a threat to health and human safety or that it has been abandoned. Notably, the legislation provides exemptions through 2012 from the new blight designation to certain communities, such as Philadelphia, Norristown and Chester among others, to protect ongoing revitalization efforts. (Manko Gold Katcher & Fox Client Alert - 5/06)

PADEP PROPOSES AMENDMENTS TO TANK PROGRAM REGULATIONS

In the April 21 Pennsylvania Bulletin, the Environmental Quality Board ("EQB") published PADEP's proposed amendments to the governing Chapter 245 regulations Pennsylvania's storage tank and spill prevention program. Other than the corrective action portion of the program, this proposal would mark the first significant Chapter 245 amendments since 1997. PADEP developed this rulemaking package in consultation with the Storage Tank Advisory Committee, other technical workgroups, and industry representatives. Among the notable elements of the proposal, PADEP seeks to re-regulate large aboveground storage tanks ("ASTs") of over 30,000 gallons capacity storing heating oil for on-premises consumptive use (which PADEP says were inadvertently exempted in the 1997 rulemaking), and bring several hazardous substances under storage tank regulation such as nonpetroleum oils, bio-diesel, synthetic fluids, and gasoline additives. The proposal would provide a phase-in period for certain requirements applicable to these newly regulated tank categories. In addition, among other technical changes, PADEP intends to require doublewall construction when new or replacement underground storage tank ("UST") systems are installed, surpassing federal rules that allow for single-wall systems. The proposal would also,

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among other things, amend tank installer, inspector, and company certification requirements; revise permitting provisions; prohibit future use of UST linings; and clarify deductible responsibilities for coverage under the Underground Storage Tank Indemnification Fund. Public comments on the proposed rulemaking were due to the EQB by June 29.

(Manko Gold Katcher & Fox Client Alert – 5/06)

PENNSYLVANIA CHAMBER OF BUSINESS AND INDUSTRY COMMENTS REGARDING PROPOSED AMENDMENTS TO THE STORAGE TANK AND SPILL PREVENTION ACT REGULATIONS

On April 22, 2006, the Environmental Quality Board ("EQB") published for public comment proposed amendments to Pennsylvania's storage tank regulations. See 36 Pa. Bull. 1851 (April 22, 2006). The Chamber has a number of concerns on these amendments as follows:

- The amended definition of "regulated substance" in 25 Pa. Code § 245.1 is a significant concern for members of PCBI for several reasons. First, through incorporating by reference nonpetroleum substances listed in 34 Pa. Code Chapter 323 ("Chapter 323"), the amendment would add over 400 chemicals to the list of regulated substances. PCBI recognizes that these substances may present environmental hazards to varying degrees; however, the substantial increase in the number of regulated substances would adversely impact the resources of both the Pennsylvania Department of Environmental Protection ("DEP") and the regulated community in implementing the storage tank program.
- Second, the proposed definition provides that if any of these 400 substances do not have a CERCLA reportable quantity, then a one-pound reportable quantity is assigned by default. Without any cost/benefit analysis, this one pound requirement appears arbitrary and may be needlessly expensive.
- Third, this amendment does not limit the applicability of the newly added regulated substances to certain categories of storage tanks. This wide ranging applicability may also result in an unnecessary expenditure of resources. The EQB should instead consider applying the Chapter 323 substances only in regulating large ASTs (similar to the regulation of oil use for heating) and USTs. Alternatively, a cost/benefit analysis should be provided to justify the addition of these substances.
- Fourth, by incorporating Chapter 323 by reference, the EQB would effectively relinquish control over this portion of the regulated substances list to the detriment of both the EQB and the regulated community. Pursuant to Act 275 of 1970, Section 1920-A of the Administrative Code of 1929, 71 P.S. § 510-20, the EQB was established to formulate, adopt and promulgate

rules and regulations necessary for the proper work of DEP. Chapter 323, however, is promulgated by the Department of Labor and Industry, which may modify this list with EQB consent. Therefore, the regulated substances under Chapter 323 should be directly incorporated into Chapter 245, rather than incorporated by reference, to ensure continued and active oversight by the EOB.

• Fifth, given the broad scope and potentially significant impact involved in bringing some 400 Chapter 323 substances within the purview of the storage tank program, these substances should have been individually identified within the proposed rulemaking package to ensure that all sectors of the regulated community, including both large and small tank owners and operators, were fully aware of and able to review and comment on this issue. Accordingly, the EQB should consider revising and republishing the proposal with a specific listing of the Chapter 323 substances.

If the EQB does move forward with incorporating the list of substances in Chapter 323, PCBI supports the temporary exclusion and phase-in period for newly regulated tanks.

- In two instances, the proposed rulemaking would incorporate by reference procedures found in DEP technical documents, including "Verification of Emergency Containment Structures for Aboveground Storage Tanks" proposed for § 245.542(d)(2)(ii), and Closure Requirements for Aboveground Storage Tank Systems proposed for § 245.561(3). The incorporation of guidance or technical documents within this regulation is of concern to PCBI because the opportunity for external review and comment on such documents would be limited than is the case with actual regulations.
- At a minimum, PCBI believes that to the extent references to technical documents remain in the rulemaking, the language "unless otherwise agreed upon or waived by the Department," presently included with the proposed AST closure technical document reference in § 245.561(3), should also be added to the proposed AST emergency containment verification technical document reference in § 245.542(d)(2)(ii). A similar waiver provision should also be added to any existing provision of Chapter 245 that incorporates a DEP technical document, such as § 245.453(a) with respect to UST closure.
- The EQB's proposed amendment to § 245.542(b)(2) would require upgrading of all piping associated with a UST system to satisfy secondary containment standards whenever more than 30% of the system piping is going to be replaced. PCBI believes that the proposal should allow for an alternative compliance method based on evidence of piping manufacturer or installer financial responsibility.
- The proposed amendment of § 254.541(e) would mandate upgrading, within three years of adopting this rulemaking, to a high-level alary with cut-off device or manned operator shutdown

■ PA UPDATES (Continued) ■

procedure for existing AST systems not otherwise taken out of service for a scheduled inspection or modification.

This proposal represents a significant effort in updating and clarifying the storage tank program regulations. However, a number of practical and implementation issues still need to be addressed. To summarize, PCBI first suggests providing cost/benefit analysis to justify the addition of over 400 Department of Labor and Industry-regulated chemicals to the list of storage tank program regulated substances. Additionally, the substances should be directly incorporated into Chapter 245 to maintain EQB oversight and to ensure that the regulated community is fully aware of an able to review and comment on the substances. Second, references to technical guidance documents should be replaced with substantive provisions to ensure full external review and comment on any changes to these requirements. Third, the replacement of UST piping systems should allow for an alternative compliance method consistent with federal requirements. Lastly, PCBI suggests that the AST overfill prevention requirements allow for the use of a visual gauge instead of a high-level alary in light of successful experience at manned AST operations.

PENNSYLVANIA CERTIFIES FIRST NUTRIENT TRADING PROPOSALS

Environmental Protection Secretary Kathleen McGinty certified two nutrient trading proposals that could generate thousands of nutrient reduction credits. Some of the credits will be available for sale to developers and dischargers with nutrient reduction obligations.

Nutrients such as nitrogen and phosphorus are essential to both plants and animals. But too much nutrient concentration feeds algae blooms that cloud the water and rob it of oxygen critical to most forms of aquatic life.

Trading enables water quality improvements by allowing entities that go beyond regulatory requirements to sell credits that help others meet their obligations.

In April, Governor Ed Rendell invested \$1.8 million to empower county conservation districts to support nutrient reduction strategies that harness market forces to meet Pennsylvania's growing development needs and simultaneously clean up waterways.

"The Mount Joy Borough Authority and Red Barn Trading Co. have developed pioneering nutrient trading models that not only establish credits that can be traded, but also provide practical solutions to sustaining a bank of credits that will meet immediate and long-term market needs in Pennsylvania," McGinty said.

Pennsylvania and other states in the 64,000 square mile Chesapeake Bay Watershed now must meet new, federally-established requirements for nutrient and sediment reduction to remove the nation's largest estuary from the U.S.

Clean Water Act's list of impaired waters by 2010.

For Pennsylvania, yearly nitrogen, phosphorus and sediment discharges to the bay must be reduced to no more than 71.9 million pounds, 2.46 million pounds and 0.995 million tons, respectively. More than half of the commonwealth is within the bay watershed.

To achieve the targeted reductions, Pennsylvania is requiring tougher water quality standards for farming operations and major point sources

(ENS - 6/26/06)

COALITION OF STATES CHALLENGE FEDERAL MERCURY RULE

Pennsylvania and 15 other states have filed a new petition in federal court challenging what the states describe as the EPA's flawed approach to control toxic mercury pollution from coalfired power plants.

The states filed the challenge after EPA announced May 31 that it would move forward with its rule despite petitions outlining how the program delays meaningful emission reductions, perpetuates hot spots of local mercury deposition and poses a serious public health threat to the unborn, young children and other vulnerable populations. EPA published its rule June 9.

Mercury is a persistent, bio-accumulative neurotoxin which can remain active in the environment for more than 10,000 years. It endangers pregnant women, the unborn, children, subsistence fishermen and recreational anglers who are most at risk for health effects that include brain and nervous system damage in children and heart and immune system damage for adults.

The federal rule is hopelessly flawed," Environmental Protection Secretary Kathleen A. McGinty said. "EPA's rule drives energy investments and jobs out of Pennsylvania. The federal plan puts our mining industry at a severe disadvantage by imposing the most stringent regulations on bituminous coal mined in the commonwealth and other eastern states. These unfair market barriers pose a very real and very serious economic challenge for our state."

The Pennsylvania Coal Association and United Mine Workers of America also are attacking the rule. In ongoing proceedings in federal court, PCA and UMWA claim EPA's rule will "result in a vast wealth transfer from bituminous coal users to subbituminous and lignite users," and further will have "adverse and irreversible impacts on the Bituminous Coal Coalition member operations, mine production, mine workers and local economies dependent upon coal mining operations."

The coalition of states filed its suit last year in the U.S. Court of Appeals for the Washington, D.C., Circuit. The suit challenges the misuse of an innovative market mechanism like the capand-trade program and a separate rule that removed power plants form the list of pollution sources subject to stringent pollution controls.

The lawsuit, which asserts that both rules violate the Clean Air Act, was put on hold by the court in October when the EPA agreed to a formal reconsideration of the rules. After more than six months, EPA adopted final rules that Filed to address any of the states' concerns.

The new petition filed by the states will allow the suit to move forward. The coalition challenging EPA's rule includes California, Connecticut, Delaware, Illinois, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New jersey, New Mexico, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

More than 20 states, including Pennsylvania, already have rejected EPA's rule to pursue state-specific proposals. The commonwealth's state-specific policy, which is under review by the independent Environmental Quality Board, would require mercury emission reductions at coal-fired power plants in Pennsylvania while the federal rule makes those controls optional.

(Env. Tip of the Week -6/26/06)

PROPOSED NONATTAINMENT NEW SOURCE REVIEW RULEMAKING

Pennsylvania's Environmental Quality Board (Board) is extending the comment period on the proposed Nonattainment New Source Review (NSR) Rulemaking until July 31, 2006. The proposed rulemaking amending 25 Pa. Code Section 121.1 (relating to definitions) and Chapter 127, Subchapter E (relating to New Source Review) was published in the Pennsylvania Bulletin on April 29, 2006 (36 Pa. B. 1991).

The proposed NSR rulemaking includes certain revisions required by the U.S. Environmental Protection Agency (EPA) to implement the final federal rule entitled "Prevention of Significant Deterioration and Nonattainment New Source Review: Baseline Emissions Determination, Actual-to-Future-Actual Methodology, Plantwide Applicability Limits, Clean Units, and Pollution Control Projects" (67 Fed. Reg. 80186, December 31, 2002). States must submit State Implementation Plan revisions containing the major elements of the December 2002 NSR rule or an "equivalency demonstration" to EPA. Pennsylvania's proposed amendments incorporate certain provisions, which survived judicial scrutiny in New York et al., v. EPA.

Comments were due to PADEP by 7/31/06.

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CONSUMER REPORTS ON MOLD

The December 2005 issue of Consumer Reports magazine weighed in on mold removal with an article called "After the storm: Cleaning up mold." It eschewed the debate over the existence of "toxic" mold with some practical guidance for consumers: "Toxic or not, it isn't good for you or your home." Consumer Reports stressed the importance of using properly trained specialists and listed a few professional organizations - AIHA, ACGIH and ASCR - for consumers to contract for referrals. However, the trade organization that was probably best represented in the write-up was NADCA. A sidebar dedicated to HVAC systems and ductwork provided the National Air Duct Cleaners Association's Web site as a general resource on duct cleaning and cited ACR 2005 as "the industry standard for assessment, cleaning, and restoration of HVAC systems." The magazine also referenced NADCA's executive director, John Schulte, with some information on how much companies typically charge for their services - \$450 for a 2,000 square-foot house." Consumer Reports said professionals should "clean the entire system from supply to return, not just the ductwork."

(Indoor Environment CONNECTIONS – 2/06)

EASIER ACCESS TO HEALTH AN ENVIRONMENTAL EFFECTS OF INDUSTRIAL CHEMICALS

A new database will provide the public with available information on the potential hazards associated with the most widely used industrial chemicals. The High Production Volume Information System (HPVIS) will provide comprehensive and easy access to basic health and environmental effects on the 2200 High Production Volume (HPV) chemicals that are sponsored under the HPV Challenge Program. This program challenges U.S. companies to voluntarily make publicly available basic health and safety data for chemicals manufactured or imported in volumes of one million pounds or more per year. HPVIS offers several options for accessing the data including, standard reports, customized requests, and the ability to review data for either individual chemicals or categories of chemicals.

Information on the HPVIS: http://www.epa.gov/hpvis [http://www.epa.gov/hpvis]

Additional information on the HPV Challenge Program: http://www.epa.gov/hpv [http://www.epa.gov/hpv]

(EPA - 4/14/06)

VAPOR INTRUSION PANEL DEFINITION COULD SLOW PROPERTY TRANSACTIONS

An international standards organization panel developing screening procedures for detecting vapor intrusion is also considering whether the chemical vapors should be defined as a hazardous substance release during initial environmental assessments of properties, which could slow real estate transactions and result in more extensive and costly cleanups, sources say.

ASTM International panelists are currently drafting language and expect to meet later this summer to consider whether vapor intrusion is a recognized environmental condition (REC),

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which means site assessors would have to determine if chemical vapors that can contaminate indoor air through vents, porous concrete and other pathways may be present. The pollution is caused by contaminants, leaked fuels and other chemicals in soil and groundwater below a structure.

A REC indicates the presence or likely presence of any hazardous substances or petroleum product on a property, but does not include de minimis conditions that post little threat, according to ASTM. A common example of a REC is contaminated groundwater.

Some environmentalists, mortgage lenders and others have suggested that if vapor intrusion is not considered a REC, it could lead to lawsuits against environmental consultants who did not consider it during site assessments or property owners who did not disclose the potential for indoor air contamination before a transaction. Sources say they believe such lawsuits have been filed, but could not cite any specific cases.

Any screening procedures developed by the ASTM panel – which includes EPA officials, real estate professionals, environmentalists, and state regulators – will likely be considered the industry standard. ASTM standards in the past have been followed in lieu of EPA regulations, including the levels of due diligence prospective purchasers of contaminated site must conduct to secure exemptions from Superfund liability under the 2001 brownfields law.

Some panelists, however, argue that releases into indoor air are not regulated under environmental laws, and other statutes such as Occupational Safety & Health Act should apply. If this is the case, sources say, then the ASTM vapor intrusion panel – which is addressing cleanup issues – cannot identify vapor intrusion as a REC.

One panelist says vapor intrusion is still an emerging concern and it is often not considered during property inspections because few states, if any, have regulations that require site assessors and cleanup experts to search for the chemical vapors at a site. The panel member says it may be difficult to convince some panelists who are real estate professionals and environmental consultants to consider vapor intrusion as a REC until states begin requiring such considerations. "Until a state like New York or California adopts regulations that require it, it may be difficult" to force ASTM to adopt vapor intrusion as a REC, the source says. Both states have a number of contaminated sites where vapor intrusion is present.

However, another panelist notes that vapor intrusion can result even if there is no evidence of a plume of underground contaminants. Factors such as nearby gas stations or dry cleaning businesses increase the likelihood of underground contaminants, and surrounding pavement can increase the problem.

During the upcoming discussions the panelists will also have to determine what criteria a site assessor will have to consider when determining if vapor intrusion is a cause for concern. The panelist says such criteria could be what is outlined in the 2002 draft EPA vapor intrusion guidance, which suggests that site assessors investigate the possibility of vapor intrusion if contamination is within 100 feet of a property. The panelist, however, says the EPA guide cautions that

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- Vapor Distribution & Transactions, pg. 8, 9
- Mold Update, pg. 8
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- Green Products, pg. 12

the distance may have to be increased if there are impermeable surfaces that push the chemical vapors closer to a building and may increase the chances of vapor intrusion.

(Superfund Report – 3/27/06)

GLOBAL WARMING WILL MAKE WATER CRISIS INTOLERABLE

An international meeting on the future of the world's fresh water resources is marked World Water Day with a renewed effort to ensure that more clean drinking water reaches the 1.1 billion people who do not have access to safe water, but the crisis is complicated by the impacts of a warming climate, a world renowned atmospheric chemist told delegates.

In addition to drinking water scarcity, about 2.6 billion people, four out of every 10, lack access to sanitation. This situation is a humanitarian crisis – dealing with it must move to the top of the global agenda say ministers and water experts meeting for the 4th World Water Forum.

In his keynote speech to the Forum, Nobel Prize Winner in chemistry Mario Molina warned that climate change and inappropriate water management might intensify global warming by the end of this century, creating "an intolerable risk."

If the current global warming trend is maintained, the temperature of the planet will rise eight degrees Celsius during this century, "an increase of historic proportions," said Molina, who shared the 1995 Nobel Prize in Chemistry for his work on the destruction of the ozone layer by chlorofluorocarbons.

Molina said intensifying rains and droughts are related to climate change and to the melting of glaciers. Climate change has exacerbated flooding and water scarcity, he said.

The year 2005 "was the warmest in the last thousand years," Molina pointed out, showing charts of "paleo-climate data," extracted from drops of water encapsulated within glaciers and information from the outer rings of trees in ancient forests.

Director-General of UNESCO Ko_chiro Matsuura says the theme of Water and Culture is of particular significance for UESCCO, which is leading the activities surrounding this year's World Water Day.

Modern approaches to water resource management have tended to be overwhelmingly technology-driven in their attempt to solve the world's urgent water problems, he said.

Water-related extreme events, such as floods and droughts, kill more people than any other natural disaster, and water-borne diseases continue to cause the death of thousands of children every day.

Because of its growth and development, the human population increasingly alters the quality and distribution of water. "But the amount of fresh water on Earth, to be shared among all forms of life, remains the same." Said Matsuura, "This situation imposes on humankind a

TECHNOLOGY UPDATES (Continued)

responsibility to develop ethically sound systems of water governance."

But, he said, technology alone will not lead us to viable solutions.

(ENS - 3/22/06)

NEW YORK VAPOR INTRUSION REVIEW SPARKS FEAR OF ADDITIONAL CLEANUPS

Plans by the state of New York to check for contamination from vapor intrusion at dozens of contaminated sites where cleanup was already considered complete could spark similar efforts by other states and EPA at thousands of similar sites, observers following the issue say.

Sources say that New York regulators have recently sent out dozens of notices to property owners who previously received "no further action" (NFA) letters, saying that polluted properties would have to be revisited to allow for investigation into possible vapor intrusion exposure. Such letters were previously considered a definitive sign that a site met environmental and health standards and would no longer trigger any regulatory action.

"I used to say that the only sure things in life were death, taxes and NFA letters ... but not anymore," says one attorney.

The DEC proposed in late 2004 to study contaminated sites where remediation decisions have already been made – particularly before 2003 – when vapor intrusion emerged as a major concern, sources say. The review may include evaluations of brownfields, Superfund, and Resource Conservation & Recovery Act sites, with a particular focus on sites contaminated with chlorinated chemicals used at drycleaning facilities and solvents used at former industrial sites. These chemicals do not easily biodegrade and have a high odor threshold that is not easily noticed by some occupants, the proposal says.

In early 2005 the New York State Department of Health (DOH) issued draft guidance as well, proposing data collection methods to be used to identify current or potential exposure to contaminants, and an overview of vapor intrusion mitigation methods. The document also recommends actions that can be taken to address exposure. State sources say they are currently working on responses to comments submitted last year and will likely release the response in the coming months.

(Superfund Report – 4/10/06)

COURT VERDICTS BATTER LEAD PAINT MANUFACTURERS

A Rhode Island jury has held a trio of lead paint manufacturers liable for a public nuisance, marking the conclusion of a lawsuit years in the making. The Rhode Island Superior Court verdict passed down in February, and some other decisions before and after it elsewhere in the country, marks a shift in judicial systems' ability to find the lead paint industry responsible for childhood lead poisoning and lead paint abatement.

In past decades, product liability claims failed because it was impossible to prove which manufacturer's paint was actually on a house. Almost all market share liability and alternative liability claims failed during that period. Rhode Island took a different route beginning in 1999, shifting its focus from individual tort claims to a public health lawsuit alleging that the mere presence of lead in paint was a public nuisance. The defendants, on the other hand, argued that intact lead paint poses no danger.

The first trial ended with a hung jury in 2002, but the retrial closed with a verdict finding three defendants – Sherwin-Williams Inc., Millennium Holdings, and NL Industries – to be liable. The presiding judge, Superior Court Associate Justice Michael A. Silverstein, is expected to order the defendants to pay for the cleanup, although the calculation of damages has yet to be determined.

Silverstein chose not to award punitive damages because there was no willful behavior and the companies had stopped producing lead paint years ago.

In what could be a direct result of the Rhode Island verdict, a California appeals court recently reversed a lower court's decision that dismissed a class-action lawsuit against the paint manufacturers. The lawsuit, County of Santa Clara v. Atlantic Richfield Co., involves several cities that claim they spent millions of dollars to remove lead paint. The appeals panel stated that the lower court erred when it dismissed the claims for public nuisance, negligence, and fraud.

One attorney for the plaintiffs said the Rhode Island Superior Court verdict and the California appellate courts ruling in favor of his clients was a one-two punch against lead paint manufacturers. Trial in the California case is scheduled to begin next year.

(Indoor Environment CONNECTIONS – 4/2006)

LATEST TOXIC RELEASE INVENTORY SHOWS CONTINUED DECLINE IN CHEMICALS RELEASED INTO ENVIRONMENT

The U.S. Environmental Protection Agency released the 2004 Toxics Release Inventory (TRI) which provides information on toxic chemicals used and released by utilities, refineries, chemical manufacturers, paper companies, and many other facilities across the nation. The TRI is compiled from data submitted to EPA by industry and the states.

The 2004 TRI data indicates a decrease of 18 million pounds of chemical releases as compared with 2003. A total of 381.8 million pounds of chemicals were released during 2004 to the air, water or landfills by facilities in the mid-Atlantic region which is comprised of Pennsylvania, Delaware, Maryland, Virginia, West Virginia and the District of Columbia. Releases in this same geographic area totaled 399.8 million pounds in 2003. When compared with the 2000 TRI data of 464.7 million pounds, the 2004 figures represent a 17.8 percent reduction in toxic pollutants released in the region.

DELAWARE

 NRG Energy Inc., Indian River Generating Station in Millsboro, Sussex County, reported the highest volume of on-site releases – just over 4.8 million pounds. These releases show an increase of 0.9 million pounds when compared to the levels reported for the previous year, due to increase in coal usage.

- 2) The Edge Moor Hay Road Power Plant in Wilmington, New Castle County, was ranked second with slightly less than 1.6 million pounds of on-site releases. The 2004 releases show a decrease of 0.2 million pounds when compared to the 2003 releases.
- 3) Premcor Refining Group, Inc. in Delaware City, New Castle County, ranked third with 1.5 million pounds of on-site releases. The 2004 releases show a decrease of 0.2 million when compared to the 2003 releases.

The releases from these three facilities were primarily acid aerosols from fuel combustion and land disposal of metals.

PENNSYLVANIA

- Reliant Energies Inc., Keystone Station in Shelocta, Armstrong County, reported the highest volume of on-site releases at 17.2 million pounds. The 2004 releases show an increase of .2 million pounds when compared to 2003 releases.
- 2) EME Homer City Generation in Homer City, Indiana County, ranked second with 8.1 million pounds of on-site releases. The 2004 releases show a decrease of .4 million pounds when compared to the 2003 releases.
- 3) Allegheny Energy Inc. Hatfield Power Station, Masontown, Greene County, ranked third with 6.9 million pounds of on-site releases.

The releases from these three facilities were primarily acid aerosols from fuel combustion and land disposal of metals contained in ash.

(EPA - 4/12/06)

WHITE HOUSE WARNS PANDEMIC FLU COULD LIMIT TRAVEL, FOOD, WATER

In the event of a bird flu pandemic, air and ground travel may be limited, and food and water supplies may be disrupted across the United States, according to planning guidelines issued today by the white House. The government advises people to stockpile food and water and plan for a situation in which they will not be able to get to work, school, health care facilities, banks, stores, restaurants, government offices, and post offices.

The Implementation Plan released in May is an extension of the National Strategy for Pandemic Influenza, announced by President George W. bush last November. The document warns that a severe pandemic could change the patterns of daily life for some time, saying, "An especially severe influenza pandemic could lead to high levels of illness, death, social disruption, and economic loss.

President Bush said, "The Plan describes more than 300 critical actions, many of which have already been initiated, to address the threat of pandemic influenza."

The effects of a pandemic could be serious and long-lasting, the White House warns. "Stock a supply of water and food. During a pandemic you may not be able to get to a store. Even if you can get to a store, it may be out of supplies. Public waterworks services may also be interrupted." the Plan states.

The government recommends that government agencies and the private sector plan with the assumption that up to 40 percent of their staff

■ TECHNOLOGY UPDATES (Continued) ■

may be absent for periods of about two weeks at the height of a pandemic wave with lower levels of staff absent for a few weeks on either side of the peak.

The 233 page Implementation Plan relies on preparedness, coordination and identification of potential issues for all sectors of society.

It recommends that key federal, state, local, and tribal law enforcement and public safety officials be brought together with experts in the public health and medical community, to discuss the influenza preparedness and response issues they may face, including maintaining civil order and how to effectively implement and enforce a quarantine or other restrictive measures.

While a flu pandemic is different from seasonal influenza because it stems from a new virus that people have not been exposed to before, the primary strategies for preventing pandemic influenza are the same as those for seasonal influenza: vaccination; early detection and treatment with antiviral medications; and the use of infection control measures to prevent transmission

The Implementation Plan says that people at high risk for severe and fatal infection "cannot be predicted with certainty" but are likely to include pregnant women; persons with compromised immune systems due to cancer, AIDS, history of organ transplant, or other medical conditions; persons less than age 65 with underlying chronic conditions; and persons age 65 or greater.

(Environment News Service – 5/3/06)

EARTH'S ICE MELTING UNDER BLANKET OF GREENHOUSE GASES

Large amounts of the greenhouse gas methane will be released into the atmosphere in the near future, according to a Dutch scientist speaking in April at the European Geosciences Union (EGU 2006) meeting in Vienna. He said global warming could lead to melting of the arctic tundras, setting the free large volumes of methane, which would in its turn increase global warming.

Methane is a much stronger greenhouse gas than carbon dioxide said Dr. J. (Ko) van Huissteden of Vrije Universiteit in Amsterdam. He explained that methane fluxes from the arctic permafrost areas attract scientific attention because the release of this powerful greenhouse gas may act as a positive feedback to climate warming.

Methane release is enhanced by increasing the metabolic activity of methane bacteria in warmer arctic soils, or by the release of methane from melting permafrost.

Van Huissteden's research in the tundra of northeast Siberian, conducted in cooperation with the Yakut Institute of Biology, shows that the floodplains of arctic lowland rivers are major methane sources, where methane fluxes may be five time as high as in non-flooded tundra bogs.

Moreover, he said, these fluxes are very sensitive to river discharge fluctuations and the incidence of river floods. Currently, both air temperature and river discharges are rising significantly in the arctic.

A panel of glaciologists at EGU 2006 said the consequence of global warming may be that, even in this century, coastal areas will be flooded worldwide.

The Greenland and West Antarctic Ice Sheets are losing ice at much faster rates than has been predicted, while the mechanisms causing this are not yet fully understood, they said Monday.

"There's no reason to run for the hills yet," says geoscientist Richard Alley of Pennsylvania State University. "However, observations show that Greenland and Antarctica are losing ice more rapidly than predicted by the models."

Eric Rignot, author of one of a number of recent papers in the journal "Science" about ice loss in Greenland, observed that over the last three years, outlet glaciers have been accelerating.

Europe's Alps could lose three-quarters of their glaciers to climate change during the coming century, according to new research from Zurich's World Glacier Monitoring Service (WCMC) presented at the meeting.

"From 1850 to 1970s, there is an average loss of 2.9 percent per decade," WGMC's Michael Zemp told EGU participants.

But that percentage of loss is accelerating rapidly. "From the 1970s until 2000, it is 8.2 percent per decade, and we see most of that increase since 1985," Zemp said.

Alpine glaciers serve as freshwater reservoirs, storing winter snowfall and releasing it over the warm months for use in homes and on farms.

Without the glaciers, snowmelt would run off all at once in the spring, causing flooding and leaving little stored water for summer and fall.

An unexpected effect of increasing emission of carbon dioxide (CO2) was reported Monday at EGU 2006. A panel of ocean experts said that by the end of this century, corals in large parts of the oceans will see their shells dissolving in sea water that is more and more acidic.

Cold water corals, species that have only been recently discovered, appear to be most threatened.

(Environment News Service – 4/4/06)

SNOWMELT IN EASTERN NORTH AMERICA EARLIER THAN LAST CENTURY

Scientists at the U.S. Geological Survey (USGS) water research center in Maine have found evidence that the snow is melting and running off into rivers of eastern North America earlier than it did in the first half of the 20th century.

According to a USGS study published in a March issue of the journal "Geophysical Research Letters," winter-spring flows in many rivers in the northern United States and Canada are occurring earlier by five to 10 days.

"We studied rural, unregulated rivers with more than 50 years of USGS and Environment Canada river flow data," explained Glenn Hodgkins, lead author and hydrologist at the USGS Maine Water Science Center in Augusta.

"Some 179 rivers in eastern North America met the criteria of our study, with 147 in the United States from Dakotas to New England and 32 in Canada from Manitoba to Newfoundland. These rivers are sensitive to changes in precipitation and temperature," said Robert Dudley, coauthor of the study, "Changes in the timing of winter-spring streamflows in eastern North America, 1913-2002."

The scientists compared the dates by which half of the total volume of winter-spring runoff has flowed past a river gaging station in each year. Most rivers north of 44° north latitude – roughly from southern Minnesota and Michigan through northern New York and southern Maine – showed earlier winter-spring streamflows.

By contrast, many monitoring stations south of this line in Iowa, southern Wisconsin, and northern Illinois showed later streamflows.

By contrast, many monitoring stations south of this line in Iowa, southern Wisconsin, and northern Illinois showed later streamflows.

Changes in average monthly flows support these results – there are high percentages of rivers north of 44° north latitude with increases in January, February, and March streamflows and relatively high percentages of rivers with decreases in May and June.

In 2005, researchers from Scripps Institution of Oceanography and the USGS found earlier streamflow across large portions of western North America in rivers with significant snowmelt runoff.

(Environment News Service – 3/30/06)

EMERGENCY RESPONSE WARNING ISSUED FOR GASOLINE-ALCOHOL FUEL MIXTURES

DOT is alerting emergency responders to appropriate emergency response guidance for responding to incidents involving fuel mixtures composed of ethanol and gasoline. The most common of these fuels is designated E85 (85% ethanol and 15% gasoline), has recently begun to be used in volume in the Midwest, primarily in the states of Illinois and Minnesota.

Fires involving E85 and other ethanol/alcohol mixtures containing more than 15% ethanol should be treated differently than traditional gasoline fires because these mixtures are polar/water miscible flammable liquids (they mix readily with water) and will degrade the effectiveness of fire-fighting foam which is not alcohol-resistant. For this reason, the Pipeline and Hazardous Materials Safety Administration recommends the use of alcohol-resistant foam to fight fires involving these fuel mixtures.

(Environmental Tip of the Week – 5/12/06)

BROOKLYN WATERFRONT TO BE CLEANED UP, REDEVELOPED

New York Governor George Pataki and New York Mayor Michael Bloomberg have announced funding that totals \$36 million to clean up and redevelop the Bush Terminal Piers, one of the biggest brownfield sites in the city.

The city of New York will remediate the Bush Terminal Piers Open Space Site on the sunset Park waterfront in Brooklyn between 43rd and 51st streets. Soil, groundwater, and sediment at and underneath the site became contaminated in the 1970s due to the unauthorized disposal of construction and demolition debris, as well as liquid wastes, including oils, oil sludges, and wastewater.

The remediation area consists of 14 acres of urban land that was created by landfilling between Piers 1 through 4 which were part of Bush Terminal. Most of the landfilled areas are covered with grasses or soils, with mature trees and two pond areas. The site is currently fenced

TECHNOLOGY UPDATES (Continued)

to prevent public access.

Once the cleanup is complete, the city plans to redevelop the site as a public open space featuring athletic fields, walkways, natural areas, an environmental education center, a boat-building area, a fishing pier, seasonal restaurant booths, a community building, and a banquet hall. The project also includes pier rehabilitation, shoreline stabilization, wetlands and aquatic habitat enhancement, and the preservation of mature trees.

The funding includes a \$17.8 million grant to New York City by the state – the largest grant ever awarded by the state for the remediation of a brownfield site.

In addition, New York City is contributing \$9 million, and the federal government is kicking in 48 million. The state will provide an additional \$700,000 Environmental Protection Fund grant and Councilmember Sara Gonzalez helped to provide \$500,000 to help transform this site into a recreational park.

(Environment News Service – 4/25/06)

PROTEIN FOUND THAT EXPLODES ANTHRAX BACTERIA ON CONTACT

A protein that can fight dreaded anthrax infections and decontaminate large areas where anthrax spores have been released as a bioweapon has been discovered by scientists at Rockefeller University.

The protein was identified by Vincent Fischetti, professor and co-head of the Laboratory of Bacterial Pathogenesis and Immunology at Rockefeller, who has been studying bacteria, including anthrax-related organisms, for the past 45 years. His results are published in the April issue of the "Journal of Bacteriology."

"Anthrax is the most efficient biowarfare agent," said Fischetti. "Its spores are stable and easy to produce, and once someone inhales them, there is only a 48 hour window when antibiotics can be used."

"We've found a new protein that could both potentially expand that treatment window and be used as a large-scale decontaminant of anthrax spores," Fischetti said.

Because it is deadly, noncontagious, and dispersed by spores, anthrax is considered a good candidate for a bioweapon. Late in 2001, letters containing anthrax spores were sent to several U.S. news reporters and two U.S. senators.

Five people died of inhalational anthrax as a result, about 24 people developed infections, and many more were exposed, but were treated in time to avoid becoming ill.

The culprit has never been found.

Now, Fischetti and his team intend to mix their newly found protein into a solution that could be used in buildings, on transportation equipment, on clothing, even on skin, providing a safe, easy way to fight the spread of anthrax in the event of a mass release.

All bacteria, anthrax included, have natural predators called bacteriophage, Fischetti explains. Just as viruses infect people, bacteriophage infect bacteria, reproduce, and then kill their host cell by bursting out to find their next target.

The bacteriophage use special proteins, called

lysins, to bore holes in the bacteria, causing them to explode.

In 2004, Fischetti and colleagues identified one of these lysins, called PlyG, and showed that it could be used to help treat animals and humans infected by anthrax.

They have now identified a second lysine, which they have named PlyPH, with special properties that make it a good therapeutic agent and useful for large-scale decontamination of areas like buildings and military equipment.

The new protein has several advantages. Most lysins, including PlyG, are only active in a very specific pH range of six to seven, so that they work effectively in the human bloodstream, but may not be useful in many environmental conditions

The PlyPH protein would be combined with a non-toxic aqueous substance developed by a group in California that will germinate any anthrax spores it touches. As the spores germinate, the solution would kill them on contact within minutes.

(Environment News Service – 4/21/06)

U.S. AIR CLEANER BUT MILLIONS STILL INHALE SOOT, SMOG

Federal efforts to control air pollution from power plants are paying off, according to the annual American Lung Association's State of the Air: 2006 report released in April. But the report finds that nearly 15 percent of the U.S. population still lives in areas with unhealthful levels of both smog and soot.

"Our report shows real improvement in the air quality in much of the nation. We're seeing the benefits of cleaning up dirty power plants with healthier air and a better quality of life. But that doesn't mean it's clean enough, and we've still got a lot of work to do," said John Kirkwood, president and chief executive officer of the American Lung Association.

The Lung Association is urging the U.S. Environmental Protection Agency (EPA) to further protect public health by curbing pollution from marine and locomotive sources.

The State of the Air: 2006 finds that more than 150 million Americans still live in counties where they are exposed to unhealthful levels of air pollution. The report ranks the cities and counties with the dirtiest air, and provides county-by-county report cards on the two most pervasive air pollutants: particle pollution, or soot and ground-level ozone, or smog.

The report shows that an estimated 42.5 million Americans – nearly 15 percent of the U.S. population – live in 34 counties with unhealthful levels of both ozone and particle pollution.

Cities ranking among the worst in the nation for both pollutants include five in California -Los Angeles, Bakersfield, Fresno, Hanford and Visalia.

In the Midwest, residents of Cleveland, Ohio and St. Louis, Missouri experience the worst air pollution.

In the Northeast, New York City, Newark, New Jersey and Bridgeport, Connecticut are on the worst air list. And in the Mid-Atlantic region, Washington, DC; Baltimore, Maryland, and Pittsburgh, Pennsylvania are listed as having levels of soot and smog that are too high.

While air pollution is unsafe for everyone, people with asthma, adults over 65, children under 18,

people with diabetes, respiratory or cardiovascular disease are at greatest risk.

"In the eastern United States, where dirty power plants have been polluting the air for decades, efforts to control particle pollution are making a difference in the lives of people at risk from exposure to unhealthful air," said Janice Nolen, director, national policy at the American Lung Association.

The State of the Air: 2006 report takes a closer look at pollution from marine and locomotive sources. State and local air pollution officials estimate that pollution from these sources is responsible for 4,000 premature deaths a year.

The EPA has promised to issue guidelines for limiting air pollution from marine and locomotive sources but has not yet acted. Marine sources include vessels from tug boats and ferries to recreational boats. Emissions from boats foul the air in port cities like Houston, Los Angeles, and New York.

Diesel-powered locomotives continue to pollute the air in cities like Chicago and Pittsburgh.

The study was published in the March 15 issue of the American Journal of Respiratory and Critical Care Medicine.

(Environment News Service – 4/27/06)

ARSENIC FOUND IN NEW ENGLAND'S BEDROCK AQUIFER WELLS

Many private groundwater wells in New Hampshire and Maine may have arsenic at concentrations close to or above federal safety standards for public water supplies.

A new study by the U.S. Geological Survey (USGS) shows the likely locations of elevated arsenic to be bedrock aquifer wells.

These wells, often known as rock, deep, or artesian wells, are the most common type of well installed for homes in the region and it is the bedrock aquifer that is the primary source of arsenic in the locations where it is elevated, according to the findings.

"Our study shows where the highest probability of having arsenic in wells occurs," USGS hydrologist Joseph Ayotte said. "We knew from previous studies that arsenic is a regional problem in New England. The information is intended to assist planners and health officials. It is also intended to help owners in deciding whether to test their well."

The study, published in the journal "Environmental Science and Technology," identifies factors that may contribute to high arsenic in wells, and confirms findings from previous studies.

Private wells supply drinking water for over 40 percent of the population of northern New England and for 20 percent of all people in New England. They are not regulated by state or federal agencies.

Officials recommend that all private well users test their own wells for arsenic.

The current federal standard for arsenic in public water supplies is 10 micrograms per liter. In New England, 12 percent of the area studied has a greater than 50 percent chance of having wells with arsenic concentrations above 5 micrograms per liter.

Nearly one-quarter of the combined area studied in Maine and New Hampshire has a greater

TECHNOLOGY UPDATES (Continued)

than 50 percent chance of having wells with arsenic at or above 5 micrograms per liter.

"To protect families, EPA recommends that private well owners routinely test their drinking water for arsenic," Varney said. "As of January 2006, public water suppliers are required to meet a new drinking water standard of 10 micrograms per liter."

The complete findings, released in the journal "Environmental Science and Technology," are available at: http://nh.water.usgs.gov

(Environment News Service – 5/25/06)

NEW ENVIRONMENTAL SATELLITE WILL TRACK SEVERE WEATHER EVENTS

A new geostationary operational environmental satellite is now orbiting the Earth.

Designed to track hurricanes and other severe weather impacting the nation, the NOAA GOES-13 satellite was launched from the Cape Canaveral Air Force Station in Florida Wednesday aboard a Boeing Delta IV rocket.

The first signal acquisition occurred six hours and 30 minutes after the launch at the Air Force Tracking Station, Diego Garcia, located in the Indian Ocean.

The satellite will supply data critical for fast, accurate forecasts and warnings for severe weather, including tornadoes, winter storms and hurricanes.

It will detect solar storm activity, relay distress signals from emergency beacons, monitor the oceans and scan the landscape for the latest drought and flood conditions.

"This satellite will serve the nation by monitoring conditions that trigger dangerous weather, and it will serve the world by contributing vast amounts of observational data, as part of our contribution to the Global Earth Observation System of Systems," said retired Navy Vice Admiral Conrad C. Lautenbacher, Jr., Ph.D., undersecretary of commerce for oceans and atmosphere and NOAA administrator.

GOES-13, the first spacecraft in the new GOES-N/O/P series, features a highly stable pointing platform, which will improve the performance of the imager and sounder instruments.

GOES-13 has expanded measurements for the space and solar environment monitoring instruments. The satellite features a new dedicated broadcast capability to be used by the Emergency Managers Weather Information Network and a new digital weather facsimile capability for higher quality transmissions of data and products.

(Environment News Service – 5/30/06)

NEW U.S. STANDARD SET FOR GREENER COMPUTERS

The U.S. Environmental Protection Agency (EPA) and the Institute for Electrical and Electronics Engineers (IEEE) Standards Association have a new environmental performance standard to help large computer buyers make environmentally sound purchases.

Announced last week in Burlingame at the annual International Symposium on Electronics and the Environment, the new standard was initiated by a group of manufacturers, environmentalists, and purchasers, and developed with support from the EPA.

"Determining which computers are environmentally preferable is a challenge for companies, government agencies and other organizations," said Jeff Scott, the EPA's waste division director for the Pacific Southwest region.

"This standard will change the marketplace and measurably reduce the environmental impacts of computers" said Scott

impacts of computers," said Scott.

The new standard – IEEE 1680TM, Standard for Environmental Assessment of Personal Computer Products – is the first U.S. standard to supply environmental guidelines for institutional purchasing decisions involving desktop and laptop computers and monitors.

It offers criteria in eight categories – materials selection, environmentally sensitive materials, design for end of life, end-of-life management, energy conservation, product longevity and life-cycle extension, packaging, and corporate performance.

The new standard will encourage manufacturers to design their products to be used longer, be more energy efficient, easier to upgrade and recycle, and contain less hazardous materials.

(Environment News Service - 5/16/06)

GREEN PRODUCTS ON GOVERNMENT'S LIST: LEAD-FREE BULLETS, CLEANER ASPHALT

It has taken more than 15 years of campaigning but those who have been urging government agencies to buy environmentally friendly products say they see much progress. The Bush administration may resist the Kyoto treaty on climate change and Congress may debate environmental regulations, but when it comes to shopping, people in government are looking for alternatives that are healthy for the planet.

Buoyed by grass-roots support and an executive order, purchasing agents for federal and state governments could become models of a maturing environmental movement.

"Green purchasing may not be the silver bullet, but it is part of an overall set of activities that will help," said Marcus Peacock, deputy administrator of the Environmental Protection Agency.

In King County, Wash., which encompasses Seattle, government agencies have lists of products to consider when buying everything from road repair material to police cars. The county's Environmental Purchasing Program is required to review and recommend "environmentally preferable" materials "whenever practicable."

Most states have rules promoting green purchases. In New York, Gov. George E. Pataki issued orders last year for all public schools to use environmentally friendly solvents. Massachusetts, which spent \$145 million on environmentally preferred products in 2004, decided that year to become "the first state to include substantial human health and environmental considerations into a computer purchase," Government Procurement magazine reported.

Scot Case, a consultant to government agencies and businesses on environmental policy said that green-oriented buying has been increasing steadily. As awareness spreads and the number of products grows, he said, spending has been expanding by 12 to 14 percent a year.

"In this part of the country, everyone is concerned about the environment," said Eric Nelson, manager of the Environmental Purchasing Program in King County. "Still, it has been very slow to persuade all of our agencies to find alternatives that work, are at the right price and that

are the least harmful."

The King County government, which has 19,000 employees, spent almost \$18 million last year on green products, including cleaning items, biodegradable hydraulic fluids, asphalt with low emissions of noxious gases, plastic siding for trucks, alternative-fuel buses and hybrid cars. But that figure probably represented under 10 percent of total purchases.

"Our single biggest issue is, What do we mean by being green?" Mr. Nelson said. "There are not enough standards among enough products."

As part of a wider campaign, Mr. Nelson has joined with associations of government procurement agents, the EPA and industry groups to bring manufacturers, scientists and testing organizations together.

Green spending at the state and local levels pales compared with the federal government's. Executive orders from George H.W. Bush's presidency have called for more spending on recycled goods and on products deemed safe to nature.

Executive orders now require that preference be given to recycled or green products across most federal departments, from Energy to Defense. The EPA is asking the rest of the government to accept its purchasing standards, which require that green alternative be considered.

The Army, for example, spends \$100 million a year on paper, so purchasing agents have found recycled paper or paper made with fewer harmful chemicals while also requiring less energy to produce.

Although there is no directive to produce, say, an environmentally sensitive cruise missile, compliance extends to weaponry. One project that won a federal environmental award was a nuclear submarine that used propellants, paints and cleaning fluids endorsed by industry and government standard setters and that would do less harm to the environment when decommissioned.

There are also government recommendations that propellants, chemical-resistant paints and fire-suppression systems for tanks meet environmental standards. According to Mr. Case, manufacturers have been encouraged to produce lead-free bullets, now common on firing ranges, to minimize ground pollution

The EPA's influence has extended to the consumer market. Appliances now routinely carry energy Star compliance, and cleaning products may have Green Seal approval stickers, representing joint testing and certification between industry and the government, agency officials say. Likewise, computer makers have joined refrigerator manufacturers in promoting efficiencies in electricity use.

Coordinating whether the federal government complies with its own rules is the Office of the environmental Executive, which operates out of the white House and is part of the Council on Environmental Quality. Dana Arnold, the chief of staff, acknowledges that green buying is still in its early stages. It is impossible to measure progress accurately, she said, because purchases are not recorded as green.

"Some agencies are aggressive, some less so; this cannot be seen as a boutique thing to do," Ms. Arnold said.

(By Terry Schwadron, New York Times – 5/17/06)

■TECHNOLOGY UPDATES (Continued)

NUCA TRENCHLESS ASSESSMENT GUIDE NOW AVAILABLE

The National Utility Contractors Association (NUCA) has announced the release of its new Trenchless Assessment Guide (TAG), a time-saving, easy-to-use interactive software designed to help utility engineers and designers evaluate the trenchless construction methods that can be employed in the installation, rehabilitation or replacement of buried utilities. For a limited time only, TAG is being offered at the special introductory price of \$125 for members and \$195 for non-members. These prices include a free copy of the latest edition of the association's best-selling Trenchless Construction and Rehabilitation Methods manual.

The TAG approach, which is based on the trenchless methods covered in the manual, limits input data to information readily available to utility engineers at the design stage of the project, e.g., minimum depth of the proposed installation, pipe diameter, soil type(s), etc. Using the specific characteristics of the project, the software performs a preliminary screening. Characteristics of construction methods stored in the method database are compared with project requirements to ensure technical soundness and compatibility. Failure to satisfy any of the requirements eliminates a construction method from the list of technically viable methods. At the end of the analysis, the user is provided with a summary report listing all of the construction methods deemed suitable for the proposed project.

Following a brief introduction to trenchless technology, individual chapters describe the

characteristics, equipment requirements, procedures, advantages and disadvantages of each trenchless installation method.

To order online, visit the website at www.nuca.com and click on "NUCA Store" on the navigation bar.

(NUCA News Release – 5/23/06)

MARYLAND TO JOIN EASTERN STATES IN REGULATING CARBON DIOXIDE

The Maryland General Assembly gave final approval in April to the Maryland Health Air Act, which requires the state to join the Regional Greenhouse Gas Initiative (RGGI), a group of eastern states committed to regulating carbon dioxide (CO2) emissions from power plants. CO2 is the most prevalent greenhouse gas linked to global warming.

After a two-year campaign led by the Chesapeake Climate Action Network and a coalition of other environmental, faith, and health groups, the so-called "4-pollutant, or 4-P" bill passed by veto-proof majorities in both Maryland houses. Aides to Governor Robert L. Ehrlich, Jr., a Republican, say the governor does not intend to veto the bill.

"Maryland leaders took a historic step today in acknowledging the crisis of global warming and deciding to do something about it," said Mike Tidwell, director of the Chesapeake Climate Action Network. "While leaders in Washington say carbon reductions are impossible, the capital itself now borders a region stretching from Maryland to Maine where reductions are in fact happening."

Passage of the "4-P" bill in Maryland was accomplished due to grassroots activism, the Chesapeake Climate Action Network (CCAN) says.

No state in America has passed legislation that reduces all four power-plant pollutants so steeply. "It is our hope," said CCAN, that "the other states will now follow Maryland's lead and that the federal government will quickly supercede all such efforts with its own tough and comprehensive greenhouse gas reduction measures."

The carbon dioxide component of the bill, opposed by all the Maryland utilities, mandates that the state take all necessary steps to join the RGGI process.

Under the RGGI, Maryland will reduce by 10 percent the CO2 emissions from its coal-fired power plants in accordance with the model rule established by Maine, New York, New Hampshire, Vermont, Delaware, Connecticut, and New Jersey.

On March 23, the RGGI participating states released a draft version of a model set of regulations for public comment. This model rule details the proposed program, and once finalized, will form the basis of individual state regulatory and/or statutory proposal to implement the program.

To view the RGGI model rule, visit: http://www.rggi.org/modelrule.htm.

(Environment News Service – 4/4/06)

FEDERAL REGULATORY UPDATES

NEW EPA RULE TO DRIVE USE OF UV DISINFECTION

The Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR or the Rule) became effective March 6, so many drinking water utilities are looking at UV disinfection as the best available technology for meeting their Cryptosporidium inactivation requirements and goals. Although it is a relatively new technology, UV disinfection is proving itself in plants across the United States and Canada as a practical and highly effective option for water treatment.

The long-term Rule calls for:

- Monitoring of source water for Cryptosporidium;
- Risk-targeted treatment of source waters with high Cryptosporidium levels;
- Inactivation of Cryptosporidium; by all unfiltered systems
- Criteria for the use of Cryptosporidium treatment and control processes; and
- Covering or treating of uncovered finished water storage facilities.

If you are considering UV disinfection, the Rule specifies UV dose levels needed for up to 4 log credit of Cryptosporidium, Giardia, and virus. Utilities using disinfection will base their credit on the UV dose indicated by an on-line dose monitoring system. This dose monitoring algorithm will be proven through validation testing over a range of flow, water UV transmittance, and UV lamp output. UV systems must operate

within the validated range as indicated by on-line measurements of flow, UV intensity, lamp on/off status, and UV transmittance. The regulation also requires (1) regular calibration checks of UV sensors used to monitor dose delivery and (2) UV system operation that ensures at least 95 percent of the water is treated within the validated range at the required UV dose.

(By Harold Wright – Water World – 3/06)

MANUFACTURERS, IMPORTERS MUST TEST 17 HIGH VOLUME CHEMICALS

The U.S. Environmental Protection Agency has issued a final test rule that will enable evaluation of potential health and environmental risks associated with 17 high production volume HPV chemicals. HPV chemicals are manufactured or imported into the United States in amounts over one million pounds per year.

The rule requires 52 manufacturers or importers of 17 HPV chemicals to conduct screening level tests of acute toxicity, repeat dose toxicity, developmental and reproductive toxicity, genetic toxicity, ecotoxicity, and environmental fate testing related, and to provide this information to the EPA.

This final rule, which affects chemical manufacturing facilities and petroleum refineries became effective on April 17, 2006.

To date, more than 400 companies have voluntarily committed to making information available on 2,200 HPV chemicals as part of the agency's

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- RCRA Rule and Recycling, pg. 15
- Stationery Engine Emissions, pg. 15
- Hudson Cleanup Challenge, pg. 16
- Lead in Drinking Water Rule, pg. 17

High Production Volume Challenge Program, initiated in 1998.

The 17 chemicals are listed at the foot of the Federal Register notice of the final rule found here.

More information on the HPV program can be found at:

http://www.epa.gov/chemtrk/index.htm.

(ENS - 3/20/06)

EPA TO CUT TOXIC EMISSIONS FROM GASOLINE, VEHICLES, AND PORTABLE GAS CONTAINERS

Toxic fumes from gasoline, vehicles and gas containers would drop significantly and further reduce health risks under proposed new emissions standards announced by EPA Administrator Stephen L. Johnson. By 2030 EPA's proposed Mobile Source Air Toxic (MSAT) regulations and fuel and vehicle standards already in place will reduce toxic emissions from passenger vehicles to 80% below 1999 emissions.

"America has a history of loving its cars," said EPA Administrator Stephen L. Johnson. "By cleaning up our fuels and vehicle exhaust, EPA is

paving the road toward a cleaner environment and healthier drivers."

The MSAT proposal would set new benzene standards for gasoline, hydrocarbon emissions standards for passenger vehicles at cold temperatures and evaporative standards for fuel containers. Once the new standards are fully implemented in 2030, they are expected to reduce emissions of mobile source air toxics annually by 350,000 tons, including 65,000 tons of benzene. The estimated annual cost for the entire proposal would be \$205 million. EPA estimates annual health benefits from the particulate matter reductions of the vehicle standards to total \$6 billion in 2030.

The action would also harmonize federal and California evaporative emission standards for light duty vehicles.

The proposed MSAT standards would take effect in 2011 for fuel requirements, 2010 for passenger vehicles, and 2009 for fuel containers.

A 60-day comment period will begin when the proposal is published in the Federal Register. The proposal, supporting documentation, and information about submitting comments online http://www.epa.gov/otaq/toxics.htm#mobile.

(Env. Tip of the Week -3/6/06)

EPA, CORPS OF ENGINEERS MOVE TO IMPROVE WETLANDS RESTORATION AND CONSERVATION

Swamps, bogs, fens, and marshes – in short, wetlands – are as vital to our environment as coral reefs and rain forests. With that in focus, the EPA and U.S. Army Corps of Engineers (Corps) are proposing a new rule to ensure more effective wetlands restoration and preservation nationwide. According to EPA, the rule uses improved science and results –oriented standards to increase the quality and effectiveness of wetlands conservation practices under the Clean Water Act (CWA).

"We are accelerating the pace of wetlands restoration and conservation," said Benjamin H. Grumbles, EPA assistant administrator for Water. "Today's action which emphasizes the best available science, promotes innovation, and focuses on results will help our nation meet the President's ambitious wetlands goal, while promoting flexibility and accountability."

Because wetlands play such a critical role in the environment, a project proposed to be built in wetlands is first subject to review by the Corps and EPA under the CWA. Consistent with the goal of "no net loss of wetlands," this review often requires a developer to restore or create a wetland to replace the one that was impacted by the project.

The proposed rule:

- Responds to recommendation of the National Research Council to improve the success of wetland restoration and replacement projects
- Sets clear science-based and results-oriented standards nationwide while allowing for regional variations
 - · Increases and expands public participation

- Encourages watershed-based decisions
- Affirms the "wetlands mitigation sequence" requiring that proposed projects fully avoid and minimize potential wetland impacts

The proposed rule combines accountability and flexibility.

For more information regarding compensatory mitigation and how to provide comments on the proposed standards, see:

http://www.epa.gov/wetlandsmitigation
Information about the importance of wetlands is
available at http://www.epa.gov/owow/wetlands/
Additional information about the Corps'
regulatory program can be found at:
http://www.usace.army.mil/inet/functions/cw/cec

(Env. Tip of the Week -4/1/06)

NEW MODEL SERVES AS RESOURCE TO CUT TRUCK FUEL USE

wo/reg/

To help facilitate more consistent, effective state truck idling laws, EPA has developed a model that states can consider adopting to help strengthen idling reduction efforts, reduce fuel consumption and improve industry compliance. Reducing idling conserves energy, helps the environment and safes industry money. Each year, truck idling consumes over one billion gallons of diesel fuel, resulting in the emission of 11 million tons of carbon dioxide, over 180,000 tons of nitrogen oxides, as well as emission of fine particulate matter and other air toxics. The model is based on input from workshops EPA held across the country last year with the trucking industry, states, and environmental and health groups.

Information on the model: HYPERLINK "http://www.epa.gov/smartway/idle-state.htm" http://www.epa.gov/smartway/idle-state.htm
IHYPERLINK

"http://www.epa.gov/smartway/idle-state.htm" http://www.epa.gov/smartway/idle-state.htm]

NEW INTERACTIVE WEB SITE IS TOTALLY RAD

From seeing a stadium laser light show to receiving an x-ray, radiation is part of our lives. That's why EPA is launching RadTown USA, a new web site that uses an animated town to provide basic information on radiation in the environment. RadTown USA is a virtual community showing the wide variety of radiation sources commonly encountered in everyday life. The RadTown site features houses, a school, stadium, construction site, flying plane, moving train and much more to highlight and explain the many common sources of radiation.

The information is organized in a series of easy-to-understand fact sheets, with links to additional information resources. Every fact sheet includes the types of radiation sources at the location, the important roles that federal, state and local governments play in protection and control, and normal steps that individuals can take to protect themselves, such as applying sun block or installing radon detectors in homes.

Discover RadTown USA:

http://www.epa.gov/radtown [http://www.epa.gov/radtown]

(EPA - 5/1/06)

AIR TOXICS REDUCTIONS FROM MUNICIPAL WASTE COMBUSTORS LOCKED IN

To ensure continued reductions in air toxics, EPA finalized a rule tightening emissions limits for large municipal waste combustors (MWCs). Large municipal waste combustors are trash incinerators that burn more than 250 tons a day of solid waste.

In 1995, EPA adopted emission control requirements for large MWC units. These requirements were highly effective and reduced MWC emissions beyond what was required, including the reduction of:

organic emissions (dioxin/furans) by more than 90 percent,

metal emissions (mercury, cadmium, and lead) by more than 93 percent, and

acid gas emissions (sulfur dioxide and hydrogen chloride) by more than 91 percent.

The final rule will ensure that high performance levels at MWCs are maintained. EPA is also finalizing several changes to the rules to simplify implementation.

To learn more about this action: http://www.epa.gov/ttn/oarpg/t3/fact_sheets/larg eMWC_fsfinal.html

[http://www.epa.gov/ttn/oarpg/t3/fact_sheets/lar geMWC_fsfinal.html]

A fact sheet and copy of the final rule: http://www.epa.gov/ttn/atw/129/mwc/rimwc.html http://www.epa.gov/ttn/atw/129/mwc/rimwc.html] (EPA – 5/1/06)

GASB ISSUES EXPOSURE DRAFT THAT WOULD PUT THE COST OF CLEANING UP POLLUTION ON GOVERNMENT'S FINANCIAL STATEMENTS

The Governmental Accounting Standards Board (GASB) issued an Exposure Draft intended to provide guidance and consistency with respect to the accounting and reporting of obligations and costs related to pollution remediation. The proposal reflects the Board's intention to ensure that certain costs and long-term obligations not specifically addressed by current governmental accounting standards will be included in financial reports.

The proposed standards build on a Preliminary Views draft that was released for public comment in March 2005.

Specifically, the proposal sets forth the key circumstances under which a government would be required to report a liability related to pollution remediation. According to the proposal, a government would have to estimate its expected outlays for pollution remediation if any of the following occur:

- 1. Pollution poses an imminent danger to the public or environment and a government has little or no discretion to avoid fixing the problem
- 2. A government has violated a pollution prevention-related permit or license
 - 3. A regulator has identified (or evidence

indicates a regulator will do so) a government as responsible (or potentially responsible) for cleaning up pollution, or for paying all or some of the cost of the clean up

- 4. A government is named in a lawsuit (or evidence indicates that it will be) to compel it to address the pollution
- 5. A government begins to clean up pollution or conducts related remediation activities (or the government legally obligates itself to do so).

In addition to the liabilities, expenses, and expenditures which would be estimated using an "expected cash flows" measurement technique and be reported in the financial statements, the proposed standard would require governments to disclose information about their pollution clean up efforts in the notes to the financial statements.

The requirements of this proposed Statement would be effective for financial statements for periods beginning after June 15, 2007.

A copy of the proposal may be downloaded from the GASB's website at www.gasb.org.

(GASB News Release – 1/31/06)

EPA MAY REPROPOSE RECYCLING PLAN, REVISE KEY CRITERIA IN WASTE RULE

Senior EPA officials are weighing whether to repropose portions of a controversial rule to expand recycling under the Resource Conservation & Recovery Act (RCRA) and whether to finalize criteria aimed at defining legitimate waste reuse, according to EPA and other sources, who say the agency is close to announcing plans for finalizing its long-awaited definition of a solid waste (DSW) rule.

While an EPA spokeswoman declined to comment on the rule, saying it is still being discussed internally, one agency source says high-level officials are still debating what to include in the final rule's criteria for determining whether recycling is legitimate and whether to repropose portions of the regulation governing when industrial recycling is exempted from RCRA. The source suggests a reproposal would be likely if EPA decides to embrace a broader recycling exemption than initially outlined in the proposed rule.

The suggestions follow state threats not to implement the rule under their delegated RCRA programs if EPA did not weigh their concerns about a broad RCRA exemption for recycling and repropose the rule to fully explain the recycling option. The recycling option was only briefly mentioned in the preamble to proposed rule.

The DSW rule would expand exemptions from what is considered a solid waste, and therefore potential hazardous waste, under RCRA if wastes are recycled. EPA is revising the definition after federal courts said the agency in some cases was improperly regulating materials that industry was reusing in industrial processes.

But the rulemaking has attracted significant opposition from states, environmentalists and waste treatment industry officials, who are concerned that EPA could deregulate harmful materials that will be improperly handled, possibly creating new contaminated sites. A high percent-

age of Superfund sites are former recycling facilities, the critics point out.

Industry officials, however, are pressing EPA to greatly enhance the amount of waste recycling exempted from RCRA, saying the law was never intended to address reused materials and such exemptions will save energy and raw materials at a time of high energy costs.

In the proposed rule, issued in 2003, EPA proposed to exempt from RCRA waste materials recycled within a continuous process within the same industry. But the agency also announced in the preamble that it would take comment on whether to allow broader industrial waste recycling. The continuous process option would have used codes known as the North American Industry Classification System, which has been implemented by the U.S. Census Bureau and other federal agencies, for determining whether industries were considered the same. But sources say EPA dropped that idea long ago, since it received widespread opposition.

EPA also announced plans to codify criteria establishing when recycling is considered legitimate. The criteria include whether the waste is managed as a valuable commodity, whether the waste contributes to the recycling process or to a product, whether the recycling yields a product that is sold or used by the recycler and whether the reused waste contains significant amounts of other hazardous constituents, also known as toxics along for the ride (TAR).

Now, EPA is close to announcing its final plans for the rule, according to agency and other sources. But EPA delayed plans to announce in March its strategy for the regulation because of the ongoing internal talks.

Sources familiar with the rule say EPA intends to finalize some version of the proposal to permit recycling within a specific industry, possibly by allowing any recycling conducted by the same company regardless of whether it is done t the same facility. Sources say that although this version of recycling within the same industry is narrower than possibilities outlined in the proposal, which included allowing recycling between different companies, EPA will argue it is a logical outgrowth of the proposed rule.

The agency would then officially propose the broader recycling option allowing waste reuse across industry sectors since EPA only took comment on the idea of such recycling, but did not discuss it in detail in the 2003 proposal.

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The EPA official declined to say what specific recycling options were under consideration, saying the fate of the recycling plan is still being debated. But the source says that if EPA decides to embrace the broader recycling option, it would be better off reproposing it, since it would almost certainly face procedural challenges under the Administrative Procedure Act if it failed to fully flesh out the plan in a proposed rulemaking.

(Superfund Report – 5/22/06)

EPA SEEKS PUBLIC COMMENT ON UNDERGROUND STORAGE TANK DRAFT GRANT GUIDELINES

EPA has released for public comment three draft documents which contain grant guidelines for underground storage tank systems. The draft guidelines will establish minimum requirements on delivery prohibition, secondary containment, and financial responsibility and certification that states must meet to be in compliance with provisions of the Energy Policy Act. EPA worked with states and other partners to develop the grant guidelines and, when final, will incorporate them into grant agreements between EPA and states. EPA accepted public comments on these three draft guidelines until June 24, 2006. EPA's Web site provides the public with the draft guidelines, as well as details about how and where to submit comments.

Draft grant guidelines on delivery prohibition, secondary containment, and financial responsibility and certification: www.epa.gov/oust/fed-laws/epact_05.htm#Drafts

(EPA - 5/25/06)

EPA PROPOSES REGULATIONS TO LIMIT EMISSIONS FROM STATIONARY ENGINES

Proposed regulations for engines used to generate electricity and to power pumps and compressors would reduce emissions of ozone- and particle pollution-forming nitrogen oxides (NOx). The proposed regulations include two rules: New source Performance Standards that would apply to new stationary spark-ignition internal combustion engines; and a technology-based air toxics standard that would apply to certain existing, new and reconstructed stationary reciprocating internal combustion. The rules are expected to reduce NOx emissions by 66,000 tons per year by 2015. Both rules also would limit emissions of carbon monoxide, non-methane hydrocarbons and air toxics.

The agency will accept public comment on the proposed rules for 90 days after they are published in the Federal Register. EPA must issue a final rule by December 20, 2007.

More information about the proposed regula-

http://www.epa.gov/ttn/oarpg/t3/fact_sheets/sian dricefnlfs.html

[http://www.epa.gov/ttn/oarpg/t3/fact_sheets/siandricefnlfs.html]

(EPA - 5/24/06)

CHEMICAL IN PLASTICS LINKED TO PROSTATE CANCER

The first evidence that exposure to low doses of environmental estrogens during development of the prostate gland in the male fetus may result in a predisposition to prostate cancer later in life is presented by a study in the June 1 issue of the journal "Cancer Research."

In this study, a research team led by Dr. Gail Prins of the University of Illinois at Chicago (UIC) and Dr. Shuk-Mei Ho of the University of Cincinnati worked with rats during the developmental period corresponding to the second and third trimester of human pregnancy.

The scientists exposed the rats to low doses of estradiol, a natural estrogen, or to a manufactured compound that mimics the hormone action of estrogens. They found that this early exposure predisposed male rats to precancerous lesions of the prostate gland in old age.

The manufactured compound, bisphenol A (BPA), is used in making plastics and epoxy resins such as the polycarbonate plastic found in baby bottles, reusable water bottles, food storage containers, toys, pacifiers and baby teethers. BPA is also used to make epoxy resins, which coat the inside of metal food cans, and dental sealants.

Most remarkably, early BPA exposure sensitized the prostrate to precancerous lesions brought on by exposure of the adult animal to elevated estradiol," said Prins, professor or urology at UIC and senior authority of the study.

"This is highly relevant to people, because relative estradiol levels increase in aging men as a result of their increased body fat and declining testosterone levels," she said.

The doses of estradiol and BPA used in the study were similar to levels found in human serum, in the circulation of some pregnant women, and in the fetus, the researchers said.

Transfer of BPA from mother to fetus has been reported in other studies, they noted, and levels in male fetuses have been shown to be higher than those of female fetuses.

The researchers were able to demonstrate that early estrogen or BPA exposure permanently changed the methylation, or tagging, of specific stretches of DNA in the neonate's prostate cells, a phenomenon referred to as epigenetic reprogramming.

In epigenetic reprogramming, gene expression is altered without changing DNA sequences or content. Several of the epigenetically altered sites turned out to be in important genes that regulate cellular functions, they said.

The researchers conclude that exposure to environmental estrogens, such as BPA, or natural estrogens affect the pattern of gene expression in the prostate during development, and in so doing promote prostate disease with aging.

"These findings are true for an animal model, and application to human prostate disease will await future studies," the authors concluded. Ho is first author of the study and professor and chairman of environmental health at the University of Cincinnati.

The United States produces over 1.6 million pounds of BPA annually, and this chemical has been detected in the bodies of nearly all humans tested in the United States.

(ENS - 6/2/06)

HUDSON CHALLENGE MAY DEFINE EPA 'ON-SITE' LIMITS UNDER SUPERFUND LAW

EPA is facing a first-time legal challenge testing its authority to define the boundaries of a Superfund site, which is critical in a pending suit over the agency's ability to bypass local permitting roles when remediating contaminated sediment from the Hudson River, a lawyer in the case says.

On June 2, the town of Fort Edward, NY,

sought to intervene in the case of United States v. General Electric Co. in which the town objects to a provision in a proposed consent decree between EPA and GE that would allow GE to build a waste treatment plant on private land within the town's borders without approval from the local planning board,

GE, which legally discharged PCBs into the Hudson for decades, would construct the plant as part of its EPA-ordered cleanup of the river. The company would use the facility to de-water contaminated materials dredged from the Hudson before loading them onto rail cars and transporting them to a disposal site.

In its complaint, the town objects to EPA's assertion that the proposed location of the treatment plant is considered "on-site" as defined by Superfund law, and therefore exempt from local permitting laws according to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Under the proposed consent decree, the facility "is in fact, in an entirely clean area of the Town, 1.4 miles away from the Hudson River PCB site," the town argues.

In its filing, the town notes CERCLA section 121(e)(1) waives local permitting authority for cleanup actions conducted "entirely on-site." Since the law does not define the phrase "entirely on-site," EPA has interpreted it to mean "all suitable areas in very close proximity to the contamination," the town notes.

But a court has never issued a definitive ruling on the issue, says a layer representing the town. The town rejects EPA's assertion that a location 1.4 miles away from a contaminated area could still be considered "on-site."

"There's not clear judicial direction or limit on what (EPA) can fairly consider on-site," the lawyer says. "Does EPA have unlimited discretion? I can't imagine 50 miles away being considered on-site.

The town raised similar concerns in comments on the proposed consent decree earlier this year. In a response to those comments, EPA disagrees with assertions the agency's definition of on-site is "unnecessarily broad." The agency says "on-site remedial actions may, of necessity, involve limited areas of non-contaminated land" and that the agency does not believe defining on-site as areas "in very close proximity to the contamination" goes beyond the intent of Congress.

EPA references a decision in the 1883 State of Ohio v. EPA case in which the U.S. Court of Appeals for the District of Columbia ruled Superfund law "is meant to transcend artificial

But in its brief, the town argues the proposed consent decree between EPA and GE oversteps the "minimal discretion" the court granted EPA in the State of Ohio case. It also argues that "neither the consent decree nor the administrative record" provide an explanation of why the waste treatment facility must be built at the proposed location.

(Superfund Report – 6/19/06)

U.S. SUPREME COURT JUSTICES FAIL TO AGREE ON EXTENT OF CLEAN WATER ACT JURISDICTION

A majority of the U.S. Supreme Court failed to agree on the extent of federal jurisdiction over

wetlands under the Clean Water Act in a decision issued June 19 (Rapanos v. United States, U.S., No. 04-1034, 6/19/06).

A majority of the Supreme Court justices were only able to agree on vacating the judgment in two civil enforcement actions – Rapanos v. United States and Carabell v. U.S. Army Corps of Engineers – that had been consolidated for review. The court remanded both cases to the U.S. Court of appeals for the Sixth Circuit for further factual development and for reconsideration of whether the wetlands in question are "waters of the United States" as defined in the act.

The reasoning of the plurality and concurring opinions are only binding precedent in the areas in which they agree – ordering the lower courts to vacate the previous decisions and remanding the cases for reconsideration.

The opinions did not agree on what standards should be applied on reconsideration. M. Reed Hopper, an attorney with the Pacific Legal Foundation in Sacramento, California, representing Michigan developers in Rapanos said in a conference call June 19, "Everyone is disappointed that the court did not command a clear majority on defining the extent" of the act and its regulatory reach.

"We have to wait and see how this plays out. The decision is not conclusive and allows leeway for the lower courts" to interpret the act, Hopper said.

John Devine, an attorney with the Natural Resources Defense Council in Washington agreed.

"The Court's decision today muddies the water for applying the law," Devine said in a written statement June 19.

Define said the decision "should prompt congress to reaffirm that the 34-year-old statute protects all of the nation's waters, because all of those waters are connected.

In the plurality opinion written by Justice Antonin Scalia, four justices urged a test restricting jurisdiction under the act to relatively permanent bodies of water and wetlands with a continuous surface connection to waterbodies that are themselves waters of the United States.

In a concurring opinion, Justice Anthony M. Kennedy urged that significant nexus to waters of the United States must be established for jurisdiction over wetlands to exist under the act. Kennedy said a mere hydrologic connection should not be enough to establish a significant nexus in all cases. Whether an individual wetland significantly affects traditionally navigable waters should be the test, Kennedy wrote.

Hooper said the opinions rejected as overbroad the previous interpretation of the act by the U.S. Army Corps of Engineers and federal courts.

(NAIOP/Wiggin and Dana – 6/20/06)

UNDERGROUND STORAGE TANKS PROGRAM DRAFT GUIDELINES FOR COMMENT

The U.S. EPA Office of Underground Storage Tanks (OUST) has recently published for comment three draft guidelines to implement Title XV, Subtitle B of the Energy Policy Act of 2005,

which focuses on preventing underground storage tank releases. EPA, in conjunction with states and other stakeholders, developed these grant guidelines for state underground storage tank programs. EPA was to accept comments on these three draft guidelines until June 24, 2006. See:

http://www.epa.gov/oust/fedlaws/epact_05.htm# Drafts to view the drafts and obtain details about how and where to submit comments.

Grant Guidelines To States For Implementing The Delivery Prohibition Provision Of The Energy Policy Act Of 2005 (EPA 510-D-06-003, May 2006) Grant Guidelines To States For Implementing The Secondary Containment Provision Of The Energy Policy Act Of 2005.(EPA 510-D-06-003, Mat 2006) Grant Guidelines to States For Implementing The Secondary Containment Provision Of The Energy Policy Act of 2006 (EPA 510-D-06-001, May 2006) Grant Guidelines to States For Implementing The Financial Responsibility And Certification Provision Of The Energy Policy Act of 2005 (EPA 510-D-06-002, May 2006).

(*Tech Direct* – 6/1/06)

DOT REVISES RULES FOR SHIPPING INFECTIOUS SUBSTANCES

The DOT is revising the transportation requirements for infectious substances, including regulated medical waste and sharps, to adopt new classification criteria, new exceptions, and packaging and hazards communication requirements consistent with revised international standards and to clarify existing requirements to promote compliance. These revisions will ensure an acceptable level of safety for the transportation of infectious substances and facilitate domestic and international transportation.

This final rule http://a257.g.akamaitech.net/7/257/2422/01jan2 0061800/edocket.access.gpo.gov/2006/06-4992.htm is effective October 1, 2006. Voluntary compliance is authorized beginning July 2, 2006. (Env. Tip of the Week – 6/5/06)

CALIFORNIA SMALL ENGINE SMOG RULES MAY BE USED NATIONWIDE

The federal government may use California's strict pollution rules for lawnmowers and other small-engine machines as a national standard, a top EPA official has said.

California aims to cut smog emissions from the highly polluting engines by about 35%.

Margo Oge, director of EPA's office of transportation and air quality, said implementing California's standard nationally could work well, though no final decision has been made.

= "We believe harmonizing with California will be cost-effective, good for the environment, good for the industry, good for all the stakeholders," Oge said after a hearing on California's request for an EPA waiver so it can implement the rules.

"We are concerned that as other sources are being controlled, this source is going to continue to be a bigger source for air pollution, so we are pretty interested in finishing our work and putting forth cost-effective standards for the country," she said. "... A strong option that we're considering is harmonizing with California."

EPA is considering California's waiver request even as it works to write the national smallengine rules. Both decisions are expected by year's end, after lengthy delays because of opposition from Sen. Christopher "Kit" Bon, R-Mo.

Missouri is home to two factories owned by Briggs & Stratton Corp., the nation's largest small engine maker. Briggs & Stratton has resisted California's approach, which would require adding catalytic converters to the small engines that power lawn mowers, leaf blowers, chain saws and other devices.

The company says adding catalytic converters would be so costly that jobs would have to be sent overseas, and also has contended there could be fire safety risks. An EPA study mandated by Bond rejected any safety risk when it was released in March, but Bond and the smallengine industry have criticized that finding, and the industry is funding its own separate study.

Without new rules, pollution from small engines is expected to account for 15% of mobile source pollution nationally by 2020. California contains more areas with high air pollution than any other state.

(Env. Tip of the Week -7/3/06)

STATIONARY DIESEL ENGINES TO DRAMATICALLY REDUCE EMISSIONS

On June 29, EPA announced requirements intended to limit air emissions from new stationary diesel engines by up to 90%. The New Source Performance Standards will limit emissions of nitrogen oxides, particulate matter, sulfur dioxide, carbon monoxide, and hydrocarbons from new or reconstructed stationary diesel engines to the same stringent levels required by EPA's non-road diesel engine regulations. The stationary compression ignition internal combustion engines are used at facilities such as power plants and chemical and manufacturing plants to generate electricity and to power pumps and compressors.

The requirements will take effect in three increasingly stringent stages beginning in 2007. at full implementation in 2015, EPA estimates that 81,500 new stationary diesel engines will be covered by the requirements and will reduce their air pollutant emissions by more than 68,000 tons each year. The standards also limit the amount of sulfur in the diesel fuel used to run the engines.

(Env. Tip of the Week -7/3/06)

EPA RULE PROPOSED TO CONTROL EFFLUENT FROM LARGE ANIMAL FEEDLOTS

Concentrated animal feeding operations (CAFOs), such as large pig, veal and poultry, beef and dairy farms, would continue to be required to properly manage the manure they generate under a rule proposed today by the Environmental Protection Agency.

The move, in response to a 2005 court ruling, would revise the current permit system for such farms.

The proposed rule revises the National Pollutant Discharge Elimination System

(NPDES) permitting requirements and Effluent Limitations Guidelines and Standards for CAFOs. The proposal:

- Provides for greater public participation in connection with nutrient management plans. Applicants would have to submit a nutrient management plan with their permit application. Permitting authorities would be required to provide public notice and review of the plans, and include them as enforceable elements of the permit.
- Clarifies the selection of best conventional technology for fecal coliform bacteria.
- Clarifies that under the exemption established by the Clean Water Act, CAFOs land applying manure, litter or processed wastewater do not need NPDES permits if the only discharge from those facilities is agricultural stormwater.

The proposed revision is in response to a ruling from the Second Circuit Court of Appeals in Waterkeeper Alliance, et al., vs. EPA. The proposed rule is open for a 45-day comment period.

More information on proposed rule: http://www.epa.gov/npdes/afo/revisedrule

(EPA - 6/22/06)

REVISED RULE PROPOSED FOR LEAD IN DRINKING WATER

The Environmental Protection Agency plans to tighten its rules on lead. That's the gist or proposed revisions, announced in early July, that would affect the lead portions of the lead-and-copper rule for drinking water. The proposal would:

- revise monitoring requirements to ensure that water samples show how effective lead controls are
- clarify the timing of sample collection and tighten criteria for reducing the frequency of monitoring
- require that utilities receive state approval of treatment changes so that states can provide direction or require additional monitoring
- require that water utilities notify occupants of the results of any testing that occurs within a home or facility. It also would ensure that consumers receive information about how to limit their exposure to lead in drinking water.
- require systems to reevaluate lead service lines that may have previously been identified as low risk after any major treatment changes that could affect corrosion control.

The proposal is an outgrowth of EPA's March 2005 drinking water lead-reduction plan. The agency developed the plan after analyzing the efficacy of the regulation and how states and locals were implementing it. The agency collected and analyzed lead information required by the regulations, reviewed the states' implementation, held five expert workshops about elements of the regulations, and worked to better understand local and state monitoring for lead in drinking water in schools and child-care facilities.

The proposal and information about lead in drinking water can be found at: http://www.epa.gov/safewater/lead

(EPA - 7/6/06)

NJ REGULATORY UPDATES

JUDGE ORDERS REVIEW OF NEW YORK – NEW JERSEY HARBOR DREDGING

A federal court judge has ruled that the U.S. Army Corps of Engineers is violating federal law by ignoring environmental health and safety concerns related to planned dredging in the middle of a highly contaminated Superfund site beneath the New York-New Jersey harbor.

The decision stems from a lawsuit filed in January 2005 by the Natural Resources Defense Council (NRDC), NY/NJ Baykeeper, and GreenFaith. The proposed dredging area is laced with TCDD, one of the deadliest forms of dioxin.

Without proper protections, dredging would spread the contamination into surrounding waterways, the plaintiff groups argued, saying the dredging project could also wind up postponing cleanup efforts until 2012 or beyond. U.S. District Court Judge Shira Scheindlin agreed.

The contested dredging is part of a 10-year, multi-billion dollar project the Corps and the Port Authority of New York and New Jersey to open the harbor to larger container ships.

The plaintiffs are seeking to ensure that the dredging does not undermine the U.S. Environmental Protection Agency's (EPA) ongoing environmental remediation efforts in and around Newark Bay.

The area slated for dredging encompasses a large portion of the Diamond Alkali Superfund Site, including Newark Bay and portions of the adjacent Kill van Kull and Arthur Kill bordering Staten Island.

The site contains high levels of toxic chemicals that flowed downstream from industrial facilities on the Passaic River, including a now-closed plant that made Agent Orange during the Vietnam War

In November 2003, NRDC, NY/NJ Baykeeper, and Hackensack Riverkeeper announced plans to sue Occidental Chemical Corp.

In February 2004, the EPA determined that pollution in the Bay posed an "imminent and substantial" risk to human health and the environment, incorporated the Bay into the Diamond Alkali Superfund site, and ordered Occidental to carry out a comprehensive study under EPA supervision to support the design and selection of a cleanup plan.

This is the second time a federal court has ruled against the Corps on the project. In August, the same federal judge found the Corps violated the National Environmental Policy Act and sent the engineers back to the drawing board to determine how the harbor deepening project would affect efforts to assess and clean up huge amounts of toxics.

The new ruling, handed down in March, states that the Corps "continues to rely on incomplete data, faulty assumptions, and unreliable averages," and, therefore, "has not corrected the violations previously found by the Court."

The decision gives the Corps four months to address environmental concerns, and suggests to the Corps that new dredging work should be frozen in the interim.

(ENS - 3/10/06)

AGRICULTURAL PLASTICS RECYCLING GROWS IN NEW JERSEY

The New Jersey Department of Agriculture has announced its 2006 schedule for a free program to

recycle empty plastic pesticide containers at the Cumberland County Solid Waste Complex. Those participating in the program can save almost \$57 per ton in landfill tipping fees.

"It is in everyone's best interest to keep plastics out of landfills, especially those containers that once held pesticides," said New Jersey Secretary of Agriculture Charles Kuperus. "Since there is no cost to participate in the pesticide container recycling program, farmers can benefit from the savings while contributing to our state's recycling goals."

Non-refillable, high-density polyethylene #2 (HDPE #2) containers used by agricultural professional and commercial pesticide applicators will be accepted at the collection sites. In addition, HDPE #2 plastic pails, bulb crates, and similar items will be accepted.

Pesticide containers must be no larger than 55 gallons and triple rinsed. The instruction booklet, lid and metal handles must be removed.

The program is open to anyone who holds a New Jersey Department of Environmental Protection pesticide license, including state, county and municipal government agencies. Participants must follow the processing guide or the material will be rejected. A pesticide license is not needed to participate in the program if non-pesticide containers are recycled.

"This program is an excellent example of the ways in which government agencies are working together to enable the agricultural community and other licensed pesticide applicators to realize the environmental and economic benefits of recycling," said DEP Commissioner Lisa Jackson.

More than 4,000 plastic pesticide containers were recycled last year under this agricultural conservation program offered by the New Jersey Department of Agriculture. In 2005, there was a 66-percent increase in the volume of plastic pesticide containers recycled over 2004 figures.

In addition, New Jersey is extending its nationally recognized nursery and greenhouse film collection and recycling program for a 10th year. Growers may take their nursery and greenhouse film to two regional collection sites year-round—the Cumberland County Solid Waste Complex in Deerfield—and—the—Burlington—County Occupational Training Center in Mount Holly.

"New Jersey is a leader in film recycling and federal and state government agencies and nonprofit organizations have sought our assistance in setting up their own programs,"

said Kuperus. "Not only does the recycling of these materials keep them out of landfills and out of the environment, but it can save growers money in disposal costs."

(ENS - 3/28/06)

BUILDERS LOSE LEGAL CHALLENGE TO NEW JERSEY STORMWATER REGULATIONS

A New Jersey appeals court has upheld the authority of the New Jersey Department of Environmental Protection (DEP) to adopt comprehensive stormwater rules requiring 300 foot wide buffers to protect high quality waters from construction site discharge.

The DEP adopted the new stormwater management rules in February 2004 – the first major update of the regulations in 20 years. Soon after the regulations were adopted, the New Jersey Builders Association took legal action.

NJ REGULATORY UPDATES

- NY Harbor Dredging, pg. 18
- Agricultural Plastics Recycling, pg. 18
- Neglect of Cities, pg. 20
- Vapor Intrusion Update, pg. 21

In the decision handed down in mid April by the Appellate Division of the New Jersey Superior Court, the three-judge panel rejected the New Jersey Builders Association's argument that the DEP lacked the statutory authority to promulgate the stormwater rules.

"The court ruling represents a tremendous victory for New Jersey in our ongoing fight to protect the quality and quantity of our water resources," said DEP Commissioner Lisa Jackson. "Clean, safe and abundant drinking water supplies are something we cannot afford to take for granted."

The judges also noted that the New Jersey Builders Association has "mischaracterized these buffers as 'no build zones'."

"It's particularly gratifying that the court has acknowledged that without these tough stormwater regulations, developers and industry would continue building right on top of sensitive streams and reservoirs that provide drinking water to millions of our residents," Jackson said.

"New Jersey's stormwater rules are considered the nation's most protective largely because they require 300 foot vegetated buffers along Category One waterways to help filter pollutants and safeguard the quality of these waters," she said.

The DEP has applied Category One status, the state's highest level of water protection, to 10,219 acres of reservoirs and 3,855 river miles.

"This ruling by the Appellate Division affirms DEP's broad authority to protect water quality in New Jersey, as well as the need to preserve the remaining pristine waters throughout the state for future generations," said state Attorney General Zulima Farber. "The court recognized the close correlation between water quality and the way that land is used along the banks of our sensitive waterways."

(ENS - 4/17/06)

NJDEP ISSUES GUIDANCE ON HISTORIC PESTICIDE SITES CASE PROCESSING

NJDEP has issued Guidance on how it manages sites impacted by historic pesticides. Key elements are as follows:

• In March 1999, the Historic Pesticide Contamination Task Force issued their final report entitled "Findings and Recommendations for the Remediation of Historic Pesticide Contamination". That document (which can be found on the internet at:

http://www.nj.gov/dep/special/hpctf/) was prepared to address the many projects that the Department of Environmental Protection (Department) was beginning to receive where historically applied pesticide residuals were being found in soil at agricultural sites at concentrations above the Department's residential direct contact soil cleanup criteria (rdcscc).

 In addition to addressing human health risk associated with historic pesticide contamination,

NJ REGULATORY UPDATES (Continued)

this document also outlined testing protocols as well as several remedial strategies, which included:

- capping impacted soil with clean soil
- blending impacted soil to reduce concentra-
- excavation and offsite disposal of impacted soil
- Since the time that document was published, the Department has also approved compliance averaging of historic pesticides (with the exception of arsenic), and excavation and relocation of impacted soil to adjacent parcels that are to remain farmland which also have similar or greater concentrations of the same pesticide (each of these activities require Department preapproval).
- As of January 1, 2006, DEP has issued more that 150 No Further Action letters for former agricultural sites involving over six thousand acres of farmland at a cost of approximately 11.5 million dollars and an average cost of \$3,300 per remediated acre. Of these sites, approximately fifty contained concentrations of arsenic that exceeded the rdcscc of 20-ppm, with that arsenic found to be naturally occurring (non-anthropogenic).
- The application of pesticides was and is a common and accepted agricultural practice. Due to this, it is generally acknowledged that agricultural sites today may likely still have soil concentrations of historic pesticides above today's rdcscc. Based on this, a two-part trigger for notifying the Department has been utilized, requiring both parts to be present in order for Department notification. The two-part triggering criteria is as follows:
- **Trigger 1:** Sampling at former agricultural sites for historic pesticides has revealed concentrations above the rdcscc, and:
- **Trigger 2:** A land use change must occur or be planned. Land use changes include the planned development for property into residential industrial or other commercial uses.

Both conditions must be present in order for a Department notification requirement. Should both conditions of the trigger be present, parties will generally obtain Departmental oversight via the Voluntary Cleanup Program.

- The Site Investigation phase for former agricultural properties involves surface soil sampling. One surface soil sample for every 2 acres (up to ten acres) is required, with one additional sample obtained for every five acres thereafter. Evaluation of these samples must include analysis for Priority Pollutant (PP) pesticides, arsenic and lead. Note that the sample frequency for agricultural sites is based on the presumption of a homogeneous historic application of the pesticides.
- During this phase of site evaluation a baseline ecological evaluation (BEE) is also required, which involves the determination of sensitive receptors, evaluation of the presence of historic pesticides impact above the rdcscc and an evaluation for the presence of migratory pathways for the historic pesticide residue to enter the sensitive receptor. Should historic pesticides be present above the rdcscc, and a sensitive receptor and a migratory pathway be present, further ecological assessment will be required.
- If during the SI phase of site evaluation, pesticides are determined to be present at concentrations above the rdcscc, a remedial investigation,

- which will include both vertical and horizontal delineation of the pesticides impact in accordance with the TRSR is required. Though it is infrequent that the impacted soil will trigger a ground-water evaluation, it is important to be cognizant of this potential when vertically delineating during RI sampling.
- The Department is often asked just how far horizontal delineation of impacted soil must be conducted. Agricultural sites are somewhat unique in that many times only a portion of the entire farm will be utilized for development. In this scenario, offsite impact is only investigated if the adjacent areas have never been farmed, or if wetlands are involved. Wetland investigations may not always lead to remediation, even if minor impacts are noted, if adjacent parcels surrounding the wetlands continue to be utilized for agricultural purposes.
- An often-difficult challenge during the remedial investigation of agricultural sites has to do with the presence of arsenic in the soil. The use of lead arsenical pesticides dates back to the 19th century. In addition, other arsenicals have been utilized such as calcium arsenate (also used as an herbicide), chromated copper arsenate, etc. However, the presence of arsenic itself in the soil above the rdcscc does not automatically trigger the need for remediation.
- · Arsenic has been found in the soil at concentrations well above the rdcscc (currently 20 ppm), with this presence being related to a naturally occurring background condition rather than an application of a pesticide or herbicide. Since there currently is no practical laboratory procedure that can determine the difference between naturally occurring conditions and arsenic from man-made applications, the Department must rely on certain types of additional information to make this determination. In many cases, the first step is to look at lead concentrations in relationship to arsenic concentrations in individual samples. If a ratio of 3:1 (lead: arsenic) or greater is documented, the arsenic presence is almost always the result of an historic application of a lead arsenical pesticide (the most common arsenical pesticide applied in New Jersey). If a lead to arsenic ratio is less than 3:1, it does not automatically indicate that the arsenic presence is due to natural background (non-anthropogenic), but should automatically trigger a background investigation.
- Procedures for Background Determinations of Arsenic in Soils are included in the Guidance. DEP has found that soil high in glauconite and/or high in iron is often also high in arsenic. The best approach under these circumstances would be to document the soil series and the arsenic concentration in the soil, and then determine if the Department has previously approved a natural background condition for arsenic in sites in the same general area, in the same soil series and at similar concentrations.

DEP is in the process of mapping all former agricultural sites on the Geographical Information System (GIS) where naturally occurring arsenic has been identified.

- It is possible for a site to have both anthropogenic (presence due to human activity) and non-anthropogenic forms of arsenic. These cases always require a background investigation and a close scrutiny of the lead to arsenic ratio.
 - Based on Departmental experience with agri-

cultural sites, lead arsenical pesticides are seldom present 18 or more inches below grade. To error on the side of safety, and unless documentation exists to refute this, the Department has at times accepted the presumption that the top 24 inches of arsenic impacted soils are the result of anthropogenic activity, with arsenic present below 24 inches to be naturally occurring. An NFA can be issued in this scenario provided the top two feet of soil are remediated.

Prior to conducting a remedial action for pesticides in a typical agricultural scenario, it is often advantageous to see if compliance averaging can be employed. Compliance averaging cannot be utilized for arsenic exceedences due to the already elevated rdcscc (>1 in a million healthrisk), but can be utilized for PP pesticides of concern if concentrations exceed the non-residential use soil cleanup criteria.

Alternate Cleanup Criteria (ACC)

• Usually based on intended future land use (which limits exposure), an alternate cleanup criteria can be approved for several of the historic pesticides used in New Jersey present on certain sites at concentrations greater than the rdcscc. An ACC is usually a concentration that is greater than the rdcscc. Examples of where an AC may be approved include passive recreation areas, certain dedicated open space areas as well as other areas where residential use will not be permitted. The ACC is a site-specific number and its approved use is sought by the NJDEP case manager to the assistance of the DEP Environmental Toxicology and Risk Assessment (ETRA) section.

Remedial Action (RA)

If sampling of the agricultural site triggers a remedial action, several options are possible and are discussed below. Note that multiple remedial strategies may be used. In addition to Departmental approval of these options, approval may also be necessary by the local municipality and the New Jersey Pinelands Commission.

- Excavation and offsite disposal.
- Excavation and on or offsite reuse. Using this scenario requires that the receiving parcel be active farmland. This action requires Departmental approval but does not require a Deed Notice for the receiving site, since the site will continue to be farmed.
- Capping impacted soil. The impacted soil must be kept a minimum of five feet from seasonal high water.
- Consolidation and capping impacted soil.
 This scenario requires Departmental approval and a Deed Notice.
- Blending impacted soil. Historic pesticide residue soil is the only type of contamination that is permitted to be blended to achieve a cleanup goal in New Jersey. Note that spills of historic pesticides in mixing or storage areas cannot be blended since the pesticide presence at these locations was not the result of the application of pesticides, but was a non-permitted discharge of pesticides to the ground surface.
- Often blending is the most economical way of addressing historic pesticide residue in soil. This procedure requires Departmental pre-approval. It is the Department's conclusion, based on a decade of experience with blending projects that attempting to reduce soil concentrations of historical pesticide residue soils greater than five times the

NJ REGULATORY UPDATES (Continued)

rdcscc should be discouraged and may well lead to a greater volume of soil that will need to be addressed than was present prior to the start of this remedial activity. Generally speaking, blending is either accomplished with soils left in place (in-situ) or by placing soil into piles (ex-situ).

- Since blending is in fact a type of treatment, DEP requires the following:
 - A Health and Safety Plan.
- -Downgradient atmospheric monitors to measure the quantity of dust particles in the air, with a trigger level at which point blending must cease until dust can be controlled.
- A water truck on site to wet the soil to control dust.
- Blending is not permitted when a sensitive area (such as a school) is down wind and the sensitive receptor area is in session or use.

Once blending has been completed, postblending sampling is required.

- DEP requires four surface soil samples for every acre of soil blended with one sample location for every four acres of soil to be blended (minimum one location per site) sampled vertically in six-inch increments through the blended zone.
- When possible, an Entire Site No Further Action Letter should be obtained for agricultural sites. This will require evaluation of residential structures (including possible heating oil UST's), outbuildings (with possible fuel storage tanks, pesticide storage areas, waste oil storage and lead paint) and often dump areas, which are usually located at or near a wetlands area. Careful attention to historical aerial photographs should be made to detail these AOCs.
- Multiple No Further Action letters may be issued for larger residential developments as site remediation is completed. It is not uncommon that a project will be completed in phases with No Further Action letters issued for individual lots. These No Further Action letters are generally for areas of concern, with a final Entire Site No Further Action letter issued once all remedial activity on the site is completed.

The Department may require that each individual lot in a planned residential development built on former agricultural parcels be samples prior to the development receiving a No Further Action letter. This accomplishes the following:

- There is an even higher degree of certainty that the remedial activity was successful.
- There is a greater degree of confidence by the new homeowner that their lot is clean.
- The Department will list the individual Block and Lot (as designated on an approved subdivision plan) in the No Further Action letter. This may assist future environmental due diligence undertaken by a subsequent homeowner.

For more information on impacted agricultural site projects, call Justin Lauterbach or Joe Lang at (856) 467-2276.

(May 22, 2006)

NEW JERSEY PANEL RECOMMENDS OFFSHORE WIND TEST PROJECT

New Jersey should consider launching a limited and carefully monitored offshore wind-turbine test project to gather more data about the technology's costs and benefits, the state's Blue Ribbon Panel on the Development of Wind Turbine Facilities in Coastal Waters recommended in its

final report released Tuesday.

No offshore wind power project has yet been built in U.S. waters, although one is proposed for Massachusetts' Nantucket Sound.

After a 15-month examination of whether offshore wind would be an appropriate alternative energy source for New Jersey, the panel proposed that scientific baseline studies be conducted to further assess potential impacts to natural resources and the economy before wind turbine facilities are constructed in coastal waters.

The panel identified major gaps in data about New Jersey's offshore natural resources, including migratory birds and mammals, and how offshore wind turbines might affect them.

"Through the efforts of this panel, New Jersey became the first state to conduct a public and thorough investigation of the costs and benefits of developing offshore wind turbine facilities," said Edward J. McKenna Jr., mayor of Red Bank, chairman of the panel, and member of the State Planning Commission.

In its final report, the panel outlines New Jersey's growing energy supply crisis, which has resulted in high electricity costs, particularly along the state's coast.

Acknowledging that no single strategy will solve all of New Jersey's energy problems, the report urges state agencies to promote an aggressive multifaceted solution that includes energy efficiency standards and various renewable energy technologies.

For a copy of the panel's final report, visit: www.njwindpanel.org.

(ENS - 5/4/06)

NEW JERSEY SEEKS SOLUTIONS TO CHRONIC FLOODING OF MEADOWLANDS

The New Jersey Meadowlands Board of Commissioners has decided to move forward with a feasibility study to create a regional stormwater utility in the Meadowlands District that would undertake control projects and maintenance of infrastructure.

This study will examine a utility that will address flooding on a regional, long-term basis without burdening taxpayers or municipalities.

"Where the management plan outlines what areas need to be addressed, this work delves deeper into the structures that are integral in preventing flooding in the Meadowlands," said New Jersey Meadowlands Commission (NJMC) Executive Director Robert Ceberio. "This agency is stepping up by not only identifying the problem, but by offering solutions."

Problems were identified in a new report presented by the Board of the New Jersey Meadowlands Commission. Six out of 34 tide gates and pump stations in the low-lying Meadowlands region are not functional, while nine are functional with restrictions, inspectors found.

The Meadowlands district encompasses 32 square miles covering nearly 20,000 acres in Bergen and Hudson counties in northeastern New Jersey. About 17,000 of these acres were once wetlands – now only about a third of that remains.

Once an enormous dumpsite, has again become a thriving wetland habitat. Commuters can see the wetland from the New Jersey Turnpike as they pass by Lyndhurst.

The analysis showing what needs to be done to remedy chronic flooding in the Meadowlands region is a requirement of the new Hackensack Meadowlands Floodplain Management Plan. The plan, approved by the Board in October 2004, identified and prioritized chronic flooding zones and outlined future actions.

The analysis on anti-flooding infrastructure will be submitted to the Federal Emergency Management Agency (FEMA). If accepted by the agency, the floodplain management plan and analysis will make the commission eligible for millions of federal dollars to address flooding in the Meadowlands District.

(ENS - 5/30/06)

EDITORIAL – NEW JERSEY PAYS A PRICE FOR NEGLECT OF CITIES

Desirable communities feature strong neighborhood schools, transit connections to good jobs, a mix of affordable housing and open space a bike rid away.

New Jersey needs more of those kinds of towns to retain residents and attract new ones. Quality of life is key to the state's prosperity, but wavering vital signs suggest risky times ahead.

Wrong-headed policies are costing the state high-wage jobs, driving up housing prices, lengthening commutes, and concentrating poverty.

The Brookings Institution's "Prosperity at Risk: Toward a Competitive New Jersey," released in May, echoed the call last fall from smart-growth advocate New Jersey Future. They're both right: The state must better link economic development to smart land use.

But the think-tank report and NJ Future's "Four ways to Genuine Prosperity" lament urban policy that has led to the concentration of extreme poverty in the state's cities, including four of the poorest in America. Consequently, those cities aren't as ripe for the kind of urban resettlement happening in hot spots like Center City, Philadelphia.

Many older, adjacent suburbs suffer similar disinvestment and crumbling infrastructure. The state should help all of these communities prepare for better days be targeting grants more wisely (e.g. less greed by political insiders), assisting in planning and streamlining permits. State agencies in Michigan, for example, help "redevelopment-ready" towns improve community-developer relations and attract interest.

The state also should alter housing policy to increase across-the-board affordability. New Jersey prices have risen to the fifth-highest nationally, in part because restrictive zoning adds \$40,000 to \$80,000 per home, pricing about 430,000 households out of the market, Brookings found. Two-thirds of municipalities built no multifamily units in the 1990s.

To create a better mix, the state should abolish Regional Contribution Agreements, which allow wealthy communities to buy their way out of affordable housing obligations. Instead, the state should require a "growth share," in which 20 percent of all new houses must be affordable.

The state should discourage a culture that burns a gallon of gas to buy a gallon of milk. The New Jersey commute averages 30 minutes a day now,

NJ REGULATORY UPDATES (Continued)

the third-highest nationally. The state should continue to encourage village development around transit stops. Like Illinois, it should tie economic development money to jobs created near transit and/or close to affordable housing.

The question isn't whether New Jersey will grow in population. It will. The question is whether its quality of life will grow at the same rate

(Philadelphia Inquirer – 5/8/06)

NJDEP WARNS WETLAND APPLICANTS IGNORING HISTORIC RESOURCES

In February, NJDEP announced an enforcement initiative regarding failure to use due diligence in submitting historic resource information with freshwater wetland permit applications. "Historic resources" are broadly defined to include buildings, structures, objects, sites, and districts with potential significance in history, architecture, archaeology, engineering or culture. NJDEP states that the following historic resource information should be included with each permit application: color photographs of the site; a map key of all buildings, structures, ruins, or burial grounds; and any correspondence or other information regarding historic resources on or near the site. Permit applicants for projects of 20 or more acres must also conduct a thorough records search at the New Jersey State Museum and the New Jersey Historic Preservation Office ("NJHPO"), and perform a cultural resource survey to facilitate the permit review process. Further, state regulations require permittees to notify NJDEP immediately if they discover during permitted work that a property may be eligible for listing in the New Jersey or National Registers of Historic Places. If known or potential historic sites are identified prior to development activities, NJHPO must grant project approval. Conversely, any site for which a freshwater wetland permit is submitted without historic resource information will be investigated by the Bureau of Coastal and Land Use Compliance and Enforcement. The permit may be denied or terminated for failure to provide sufficient information, including information known to the applicant, a consultant, or another agent; penalties and mitigation may also be imposed.

(Manko Gold Katcher & Fox Client Alert – 5/06)

NJDEP UPDATES VAPOR INTRUSION GUIDANCE

In March, NJDEP updated its October 2005 guidance for conducting vapor intrusion investigations at contaminated sites. Among the significant revisions, screening level tables were updated to include toxicity factor changes resulting in modifications to the screening levels for two chemicals, toluene and 1,1,1 trichloroethane. As a result, the groundwater, soil gas and indoor air screening levels for these chemicals have changed. Also, the indoor air Health Department Notification Level for toluene has been set at greater than the new toluene residential Indoor air Screening Level.

In addition, based on removal of three chemicals (cis-1,2 DCE, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene) from the EPA Region III Risk-Based Concentration table, these chemicals

have also been removed from NJDEP guidance document. Further, Ground Water Screening Levels ("GWSLs") identified in the guidance tables have been updated based on the latest NJDEP Ground Water Quality Standards promulgated in November 2005.

We recommend that remediators conducting vapor intrusion investigations frequently review the NJDEP vapor intrusion web site for the latest information. NJDEP will periodically update its screening level tables soon after new toxicity factor information becomes available from EPA Region III (April and October), and will update the guidance document as the state of the science advances.

(Manko Gold Katcher & Fox Client Alert – 5/06)

NJDEP ISSUES NRD INNOCENT PURCHASER CERTIFICATION FORM

NJDEP recently finalized a self-certification form for developers t submit when requesting a No Further Action ("NFA") letter for natural resource damage ("NRD") liability, NJDEP anticipates the self-certification process will expedite NFA determinations for eligible developers undertaking voluntary cleanups without waiting for those liable to NJDEP for NRD damages to resolve such liability.

To promote brownfields redevelopment, the New Jersey legislature enacted a law in February 2005 providing eligible developers protection from NRD claims at brownfield sites. A developer qualifies for the NRD liability protection if it: (1) already acquired or will acquire property on or after January 6, 1998; (2) acquired the property after any discharge of a hazardous substance occurred; (3) is in no way responsible for the discharge and is not a corporate successor to the discharger or any other liable person; and (4) has not be contract assumed liability for historical NRDs.

The self-certification is effectuated by submitting a fully executed National Resource Damages Subsequent Purchaser Certification along with a final report detailing remediation activities undertaken to meet the requirements for an NFA determination. NJDEP will then review the document and, if acceptable, issue the NFA determination to the developer. The certification form cannot be modified, and subjects the developer to punishment for willfully false statements. NJDEP states that this process will "significantly streamline" the NRD liability process as "purchasers (with the assistance of their attorney) can determine if they qualify for the liability protections independent of DEP."

(Manko Gold Katcher & Fox Client Alert – 5/06)

PROPERTY TRANSACTIONS IN NEW JERSEY: PHASE I OR PRELIMINARY ASSESSMENT?

The acquisition of a property with a commercial or industrial past can be a great investment; however, it is important for the buyer to evaluate environmental liabilities prior to purchase. By now it is no secret that state and federal laws sometimes do hold property owners responsible for contamination regardless of whether they were or were not a contributor.

Lenders typically require Phase I Environmental Site Assessments (ESA) for properties where there is the potential for environmental issues to be of concern. The Phase I is part of the due diligence process and is the basis on which future financial and environmental decisions are made. However, in New Jersey, the New Jersey Department of Environmental Protection (NJDEP) defines due diligence as a Preliminary Assessment (PA) and Site Investigation (SI), if necessary.

The PA is much like a Phase I with a more indepth search into the property's historical use, prior tenants, and past production processes. The NJDEP requires specific information from a number of sources be provided in the PA which are not included in a typical Phase I. Additionally, if site operations are subject to the provisions of the Industrial Site Recovery Act (ISRA), there are certain "triggers" which require that a PA be filed with the state (defined in N.J.A.C. 7:26B). However, even if the subject site is not subject to ISRA, there are many benefits to conducting a PA over a Phase I which can prevent additional delays and expenditures which may arise further down the road. A few of the most important reasons are as follows:

- The NJDEP will not issue a No Further Action (NFA) Letter and Covenant Not to Sue for the entire site unless a PA has been properly conducted and submitted. Example: If an area of concern (AOC) is identified in a Phase I and is further investigated and remediated under NJDEP oversight, the NJDEP will only issue an NFA letter for that specific AOC leaving the rest of the site subject to additional environmental issues.
- In order to qualify for innocent purchaser defenses in New Jersey, the NJDEP requires a PA be conducted. If a PA is properly conducted, and no AOCs are identified at that time and environmental impacts are later discovered which are not a result of new operations, the owner is deemed an innocent purchaser and state funding is available for remediation of that AOC under the NJ Spill Act. This provides the property owner with a "cheap" environmental insurance policy.
- Conducting a PA may reveal additional environmental concerns which would not have been identified in a Phase I. This allows a more accurate assessment of the environmental liabilities prior to purchasing a site and assuming the liability.

A PA can usually be conducted for only a few hundred dollars more than the standard Phase I ESA which is completed in accordance with the American Society of Testing and Materials (ASTM) standards. In most cases, and especially if a lender is involved, a combined PA/Phase I should be completed in order to satisfy both the lender and the NJDEP.

When taking these issues into account, it is easy to see that completing a Preliminary Assessment as part of your due diligence in New Jersey is the smarter, more conservative approach to dealing with environmental issues. For additional information, feel free to contact me in our New Jersey office.

- Justin Lauterbach, General Manager, RT NJ Office.

FEDERAL REGISTER NOTICES

http://www.epagov/homepage/fedrgstr

Environmental Protection Agency Implementation of the 8-Hour Ozone National Ambient Air Quality Standard – Phase 1: Reconsideration (Federal Register -3/27 /06)

Department of the Army, Corps of Engineers Environmental Protection Agency Compensatory Mitigation for Losses of Aquatic Resources; Proposed Rule

-3/28 /06)

(Federal Register

Environmental Protection Agency Control of Hazardous Air Pollutants from Mobile Sources; Proposed Rule. EPA is proposing controls on gasoline, passenger vehicles, and portable gasoline containers (gas cans) that would significantly reduce emissions of benzene and other hazardous air pollutants. (Federal Register -3/29 /06)

Environmental Protection Agency Resource Conservation and Recovery Act Burden Reduction Initiative; Final Rule.

(Federal Register – 4/4/06)

Environmental Protection Agency Criteria for the Safe and Environmentally Protective Use of Granular Mine Tailings Known as "Chat.". Mandatory criteria for the environmentally protective use of chat for transportation construction projects carried out in whole or in part with Federal funds, and a certification requirement. Chat used in transportation projects must be encapsulated in hot mix asphalt concrete or Portland cement concrete unless the use of chat is otherwise authorized. (Federal Register - 4/4/06)

Mine Safety and Health Administration Diesel Particulate Matter Exposure of Underground Metal and Nonmetal Miners; Final Rule.

(Federal Register - 5/18/06)

Environmental Protection Agency Standards Applicable to Generators of Hazardous Waste; Subpart K—Standards Applicable to Academic Laboratories; Proposed Rule. (Federal Register - 5/23 /06)

Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry; Proposed Rule (Federal Register – 6/14/06)

Environmental Protection Agency National Pollutant Discharge Elimination System; Establishing Requirements for Cooling Water Intake Structures at Phase III Facilities; Final Rule. (Federal Register – 6/16/06)

Environmental Protection Agency Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines for Concentrated Animal feeding operations in Response to Waterkeeper Decision; Proposed Rule (Federal Register - 6/30/06)

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- Justin Lauterbach, General Manager, RT NJ Office

PENNSYLVANIA BULLETIN NOTICES

Facilities General Permit; Processing of Used Restaurant Oil, Yellow Grease, Grease Trap Waste, Oils and Animal Fat from Food Processing or Rendering Plants, Waste from Ethanol Production, Soybean Soap Stock, Float Grease, and Off-specification Vegetable Oils to Produce Biofuel and Biodiesel (General Permit WMGR109):

Issued under the Solid Waste Management Act General Permit No. WMGR109

Final: 3/17/06

DRAFT TECHNICAL GUIDANCE - Substantive Revision:

DEP ID: 383-3301-108. Title: Laboratory Reporting Instructions for Lead and Copper under the Lead and Copper Rule.

Draft: 3/24/06

PROPOSED RULEMAKING:

Environmental Quality Board [25 PA. CODE CH. 245] Administration of the Storage Tank and Spill Prevention. 4/22/06

FINAL TECHNICAL GUIDANCE:

DEP ID: 361-0100-003. Title: Water Quality Toxics Management Strategy.

Final: 4/28/06

PROPOSED RULEMAKING: Nonattainment New Source Review

The Environmental Quality Board (Board) proposes to amend § 121.1 (relating to definitions) and Chapter 127, Subchapter E (relating to new source review).

4/29/06

TECHNICAL GUIDANCE:

Pennsylvania Industry-Wide Coproduct No. 1; Reclaimed Asphalt Pavement.

rillal. 3/3/00

FINAL TECHNICAL GUIDANCE:

DEP ID: 383-2125-108. Title: Public Water Supply Manual – Part II Community System Design Standards.

Final: 5/5/06

DRAFT TECHNICAL GUIDANCE:

DEP ID: 363-0300-003. Title: Pennsylvania Model Stormwater Management Ordinance (Draft Ordinance).

Draft: 5/13/06

Proposed General Plan Approval and General Operating Permit for Feed Mills (BAQ-GPA/GP-15)

5/13/06

DRAFT TECHNICAL GUIDANCE - Substantive Revision:

DEP ID: 383-0810-106. Title: Summary of Key Requirements for Surface Water Filtration.

Draft: 5/19/06

RULES AND REGULATIONS:

Amendment to the Water Quality Regulations, Water Code and Comprehensive Plan to Establish Pollutant Minimization Plan Requirements for Point and Nonpoint Source Discharges of Toxic Pollutants

5/19/06

FINAL TECHNICAL GUIDANCE:

DEP ID: 363-4000-003. Title: Standards and Guidelines for Identifying, Tracking, and Resolving Violations of the Storm Water Management

Act.

Final: 6/2/06

Proposed Water Quality Certification under Section 401 of the Federal Clean Water Act and Federal Consistency Review under the Coastal Zone Management Act of 1972, as amended, for the Army Corps of Engineers Pennsylvania State Programmatic General Permit (PASPGP-3)

6/2/06

DRAFT GUIDANCE - Substantive Revision:

DEP ID: 294-2309-001. Title: Radon Certification Policy.

6/9/06

FINAL TECHNICAL GUIDANCE:

DEP ID: 563-2112-101. Title: Aboveground Storage Tanks on Coal Mine Permit Areas.

DEP ID: 563-2504-201. Title: Blanket Bond Program for Coal Surface Mine Sites.

6/16/06

DRAFT TECHNICAL GUIDANCE - Substantive Revision:

DEP ID: 394-2000-002. Title: Pennsylvania's Nonpoint Source Management Program Update.

6/16/06

Availability of Draft Integrated Water Quality Monitoring and Assessment Report

6/16/06

DRAFT TECHNICAL GUIDANCE - Substantive Revision:

DEP ID: 383-2126-303. Title: Public Water Supply Manual – Part III; Bottled Water, Bulk Water Hauling, Water Vending Machines and Retail Water Facilities.

DEP ID: 563-2504-001. Title: Conventional Bonding for Land Reclamation – Coal.

6/23/06

DRAFT TECHNICAL GUIDANCE:

DEP ID: 562-4000-102. Title: Increased Operation and Maintenance Costs of Replacement Water Supplies.

6/23/06

Standards for Contaminants; Mercury:

The Environmental Quality Board (Board) proposes to amend Chapter 123 (relating to standards for contaminants) to read as set forth in Annex A.

6/24/06

KEY HIGHLIGHTS

FEDERAL UPDATES

- Pollution Costs/Financial Statements, pg. 26
- RCRA Rule and Recycling, pg. 15
- Stationery Engine Emissions, pg. 15
- Hudson Cleanup Challenge, pg. 16
- Lead in Drinking Water Rule, pg. 17

PA UPDATES

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- PA Mercury Control, pg. 5
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- Nutrient Trading, pg. 7

NJ REGULATORY UPDATES

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- Vapor Intrusion Update, pg. 21

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- Vapor Distribution & Transactions, pg. 8, 9
- Mold Update, pg. 8
- Brooklyn Waterfront Redevelopment, pg.10
- Green Products, pg. 12

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