The RT Review

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SUPREME COURT DECIDES ON "PROPERTY TAKING" BY GOVERNMENT TO FACILITATE PRIVATELY FUNDED REDEVELOPMENT

In a case called KELO ET AL. v. CITY OF NEW LONDON ET AL. the U.S. Supreme Court decided on June 23, 2005, that government takings to facilitate private redevelopment are legal in the United States. Key excerpts from the Court's syllabus are as follows:

• After approving an integrated development plan designed to revitalize its ailing economy, respondent city, through its development agent, purchased most of the property earmarked for the project from willing sellers, but initiated condemnation proceedings when petitioners, the owners of the rest of the property, refused to sell. Petitioners brought this state-court action claiming, *inter alia*, that the taking of their properties would violate the "public use" restriction in the Fifth Amendment's Taking Clause. The trial court granted a permanent restraining order prohibiting the taking of the some of the properties, but denying relief as to others. Relying on cases such as *Hawaii Housing Authority v. Midkiff*, 467 U.S. 229, and *Berman v. Parker*, 348 U.S. 26, the Connecticut Supreme Court affirmed in part and reversed in part, upholding all of the proposed takings.

• *Held*: The city's proposed disposition of petitioners' property qualifies as a "public use" within the meaning of the Takings Clause. Pp. 6-20. (a) Though the city could not take petitioners' land simply to confer a private benefit on a particular private party, see, e.g., *Midkiff*, 467 U.S., at 245, the takings at issue here would be executed pursuant to a carefully considered development plan, which was not adopted "to benefit a particular class of identifiable individuals," ibid. Moreover, while the city is not planning to open the condemned land – at least not in its entirety – to use by the general public, this "Court long ago rejected any literal requirement that condemned property be put into the use for the . . . public." Id.,at 244. Rather it has embraced the broader and more natural interpretation of public use

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NJDEP ISSUES DRAFT VAPOR INTRUSION GUIDANCE

In mid-June, the New Jersey Department of Environmental Protection issued draft Vapor Intrusion Guidance, which is very important, because procedures and approaches in the Guidance are already being used at a significant number of New Jersey solvent and petroleum release sites. DEP has proposed using a phased approach to investigate the vapor intrusion (VI) pathway, that follows basic provisions of EPA Guidance, while incorporating New Jersey specific factors and policies, as appropriate.

The guidance includes a discussion of the VI pathway, VI screening levels to be used during the site evaluation process, sampling and analytical requirements, site specific screening options, remedial options, monitoring and maintenance requirements, community outreach, and a methodology to evaluate background indoor air volatile organic concentrations at a site.

Key highlights of the guidance are as follows:

- The objective of the guidance document is to determine whether site contaminant VI is occurring, and to highlight what actions are appropriate. VI is defined as the migration of volatile chemicals from the subsurface into overlying buildings. VI can sometimes occur along preferential pathways, such as underground utilities lines, or directly through soil, potentially impacting the indoor air quality of the affected building with volatile organic compounds.
- DEP believes the basis for the guidance is in the Technical Requirements for Site Remediation, as updated in 2003, which, in NJAC Sections 7:26E-1.11, and 7:26E-1.13, includes remedial action priority to limit movement of contaminants through any pathway, and ensure that releases of contaminants do not result in the release reaching structures or air in concentrations that pose a threat to human health.
- Further, Section 7:26E-3.5, stipulates that site investigation of building interiors shall be conducted when contaminants outside the building have potential to migrate into the building. Vapor hazards and risks are also discussed in 7:26E-4.4 (h) 3viii and 7:26E-6.3 (d) 7.
- DEP intends for the guidance to be used at VOC contaminated sites, and, in particular, if water and/or soil remediation systems are proposed such as air injection, bioremediation, bioventing, and chemical oxidation, which processes themselves could produce increased soil vapor.
- DEP while acknowledging that the document is guidance, expects that the guidance will be used, and that the regulated community will consult with the Department before implementing any methodology or procedures not included in their document. DEP has developed a pathway investigation strategy as described in the following text.
- DEP intends to update its guidance from time to time, and updates to screening levels and other sections of guidance will be posted at www.state.nj.us/dep/srp/guidance/vaporintrusion/.
- DEP believes that the key factors affecting vapor migration are:
  - Biodegradation (of VOCs as they migrate in the vadose zone)
  - Site Stratigraphy
  - Soil Moisture and Groundwater Recharge
  - Fluctuations in Water Table Elevation
  - Ventilation Systems in Commercial/ Industrial Buildings.

It also should be noted that HVAC systems can be designed, to prevent vapor intrusion. For buildings where retro fitting a building with a vapor barrier is impossible, use of a "positive pressure" HVAC system is the best alternative. At a site in Massachusetts, with significant perchlorethlene dry cleaning releases, RT recommended installation of positive pressure HVAC system, which has been successfully controlling VI concerns, for more than five years.

- DEP has developed groundwater to indoor air screening levels, which are based, in part, on the widely recognized Jackson and Ettinger Model, adopted by USEPA. Based on updates from EPA, NJDEP intends to update screening levels from time to time; these will be posted on the following DEP website:

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Directory

Corporate Headquarters
215 West Church Road
King of Prussia, PA 19406
Phone: (610) 265-1510
FAX: (610) 265-0687
E-mail: RTENV@AOL.COM
World Wide Web: HTTP://RTENV.COM
24 HOUR
URGENT LINE SERVICE
800-725-0593
Gary Brown, P.E., President
Phone: (610) 768-0232
E-mail: GBROWN@RTENV.COM
Rich Johnson, P.G.
Phone: (610) 265-1510 Ext. 11
Hydrogeology Group Manager
E-mail: RJOHNSON@RTENV.COM
Walter Hungarter
Phone: (610) 265-5599
Engineering Group Manager
E-mail: WHUNGARTER@RTENV.COM
Rob Carey
Phone: (610) 265-1510 Ext. 31
Remediation Group Manager
E-mail: RCAREY@RTENV.COM
Mark Eschbacher, P.G.
Phone: (610) 265-1510 Ext. 32
Senior Hydrogeologist
E-mail: MESCHBACHER@RTENV.COM
New Jersey
Justin Lauterbach
Phone: (856) 467-2276 Ext. 119
E-mail: JLAUTERBACH@RTENVNJ.COM
Suite 306, Pureland Complex
510 Heron Drive, P.O. Box 521
Bridgeport, NJ 08014
Phone: (856) 467-2276
FAX: (856) 467-3476
Regional Partners
California
Bob Smyth
Phone: (856) 234-1730
FAX: (856) 234-4387
Massachusetts
Andy Irwin
Phone: (508) 653-8007
FAX: (508) 653-8194
Michigan
Michael Carlson
Phone: (248) 585-3800
FAX: (248) 585-8404
North Carolina
Phil Rahn
Phone: (336) 852-5003
Ohio
Ron Clark
Phone: (330) 375-1390 Ext. 207
Virginia
Edward Berg
Phone: (757) 599-6985
FAX: (757) 599-3501

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www.state.nj.us/dep/srp/guidance/vaporintrusion/.

- DEP has presented considerable in-depth information on actual sampling procedures, and has also indicated that an update to the NJDEP Field Sampling Procedures Manual, will be forthcoming shortly. There are specific requirements in the Guidance for determining site conditions, including soil conditions, high porosity areas, and low permeability zones, as part of the investigation work, by gaining exterior near slab soil gas samples a minimum of 5 feet below ground surface, providing assurance that an annular seal is maintained, by using tracer gas, or, installing permanent soil gas probes. A Certified Laboratory must be used where sub-slab soil gas sampling is used as a Stand Alone Assessment. Other laboratories can also be considered. There are specific requirements for purge volumes, and sample flow rates, in the Guidance.
- When indoor air sampling is completed, one of the two sampling events must take place during the months between November and March, since those months are considered "worst case conditions" for buildings. For installing soil gas probes, licensed drillers may need to be utilized, if the criteria for boring depth and diameter of the boring, or the length of time a probe will remain in the hole are exceeded.
- When conducting sub-slab soil gas sampling, a decision on the frequency of sampling shall be determined on a site specific basis. Sub-slab soil gas samples are to be compared to the Soil Gas Screening Level. For crawl space air samples, DEP has determined that a attenuation factor of 1.0 is applicable.
- Before sub-slab sample locations are selected, DEP considers that a building walk through is a critical element prior to the investigation of the VI Investigation Work Plan. The following components of a building walk through must be addressed in the Work Plan:
  - Detection of potential background sources of volatile organic compounds
  - Determination of the building construction
  - Recognition of points of VI entry into a structure
  - Identification of possible sample locations
  - Education of the occupants on VI and sampling procedures
- DEP also considers that, particularly when basements are present, that sub-slab samples by themselves may not be adequate, to the degree that vapor intrusion is occurring through utility trenches, sumps, or cracks or other openings in the sidewalls of basements. Investigators are required to note the presence of sumps, cleanouts and/or floor drains when inspecting buildings. Specific procedures are included within the guidance on installing permanent sampling points, and installing temporary sampling points. Sub-slab soil gas samples are to be analyzed using EPA Method TO-15. If sub-slab soil gas sampling is a Stand Alone Assessment a Certified Laboratory using EPA Method TO-15 or TO-17 must be used. There are requirements for purging the vapor probe, prior to actually beginning the sample event. Where there are multi-family residential units in commercial or retail buildings, DEP feels that multiple vapor probes are necessary, with the decision on a number of sub-slab points required based on the Conceptual Site Model.
- DEP expects the investigator will educate occupants on the VI pathway. DEP has provided a one page advisory paper to be utilized for this purpose.
- Procedures are also included in the guidance for completing indoor air pathway work. One ambient (outdoor) sample is expected to be taken concurrent with taking indoor air samples, which usually involves collecting a minimum of one indoor air sample from the ground floor living space at each property, typically using a SUMMA cannister and analyzing same using EPA Method TO-15. Indoor air samples are expected to be completed over an 8 to 24 period. DEP requires the collection of ambient temperature and pressure readings during the collection of air samples. Either portable meteorological instrumentation can be used, or data can be obtained from the National Weather Service at http://www.weather.gov.
- Indoor air results are compared to the Indoor Air Screening (IASL). Crawl space results also get compared to IASL.
- When reviewing the results of the VI investigation work:
  - 6 foot thick lens of groundwater with contaminants below the Groundwater Indoor Air Screening Level (GWIASL) can be considered sufficient justification to conclude that the plume is not a source for vapor intrusion in the immediate vicinity. For lenses between 3 and 6 feet thick, further work to determine whether there is or is not a problem will likely be required. If the lens is less than 3 feet thick, which is over a plume where groundwater concentrations exceed the GWIASL, further investigation work will be required.
  - If sub-slab soil gas results exceed the SGSL, an additional investigation of the VI pathway is needed. Multiple sub-slab soil gas samples may have to be collected.
  - Basement indoor samples get compared to the Indoor Air Screening Level (IASL). If there are exceedences, additional investigation is required, and once data is confirmed, appropriate remedial

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action must be proposed. Where sub-slab and indoor air sample work is completed concurrently, DEP believes that a concentration gradient between sub-slab indoor air samples greater than 20 times the sub-slab result strongly suggest that the VI pathway is complete.

- Where the pathway is considered complete, further investigation and/or remediation may be required.
- Indoor air analytical results are compared to the Immediate Environmental Concern Air Action Level (IECAAL). The implementation of an interim remedial measure will be required if sample results exceed the IECAAL:

- Notifications - although investigators may elect to forward results to occupants, NJDEP is responsible for officially notifying property owners and occupants about sampling results. DEP will submit a written report, consisting of a cover letter explaining findings and a table summarizing the results.
- DEP has provided in the Guidance in-depth technical information on petroleum hydrocarbon contamination, and its context in VI studies, as well as approaches to separate background contamination, from VI impacts from releases.
- Remedial Action techniques which are typically implemented when the VI problem is found, are as follows:
  - Sealing openings and cracks with caulk or expanding foam (preferably VOC-free)
  - Repairing compromised areas of the slab or foundation
  - Covering and sealing exposed earth and sump pits
  - Installing a sealed vapor barrier (e.g., plastic sheeting, liquid membrane) over earthen, gravel, etc. floors or crawlspaces
  - Utilizing natural ventilation
  - Installing a subsurface depressurization system
  - Installing a pressurized air curtain
  - Utilizing house pressurization
  - Utilizing heat recovery ventilation
  - Installing a soil vapor extraction system
- Where properties and parcels have source concentrations above generic screening levels (GWIASL or SGSL), official notification of the property owner is necessary, and institutional controls will be required upon request for closure by a responsible party. Nonresidential screening levels (SGSL or ISL) can be used, contingent upon the responsible party obtaining agreement with the property owner and the implementation of institutional control at the affected structure/property. This agreement is to be submitted as part of the Remedial Action Work Plan.

At *RT Review Press Time*, RT was preparing comments to DEP, on the Vapor Intrusion Guidance, which will significantly affect redevelopment of Brownfields sites in New Jersey. In RT already has substantial experience in managing VI from all types of sources at solvent and petroleum release sites, including:

- VI screening evaluations
- soil gas and indoor air investigations
- design of vapor barrier liner systems at residential and commercial facilities
- certifying vapor barrier liner system construction.

We have completed this work at dozens of sites in Pennsylvania, New Jersey, Massachusetts and elsewhere. A full summery of the VI Guidance is available on our web site at www.rtenv.com. If you need more information on the proposed NJDEP VI policy, call RT's Joe Lang at (856) 467-2276 or by Email at JLANG@RTENVNJ.COM.

REPORT POINTS TO RISK IN WIDELY USED PLASTIC

Evidence is mounting that a chemical in plastic that is one of the world's most widely used industrial compounds may be risky in the small amounts that seep from bottles and food packaging, according to a recent report in a scientific journal.

The authors of the report, who reviewed more than 100 studies, urged the Environmental Protection Agency to reevaluate the risk of bisphenol A and consider restricting its use.

Bisphenol A, or BPA, has been detected in nearly all human bodies tested in the United States. It is a key building block in the manufacture of hard clear, polycarbonate plastics, including baby bottles, water bottles, and other food and beverage containers. The chemical can leak from the plastic, especially when the containers are heated, cleaned with harsh detergents or exposed to acidic foods or drinks.

The plastic chemical is the focus of one of the most contentious debates involving industrial compounds that can mimic sex hormones. Toxicologists say that exposure to man-made hormones skews the developing reproductive systems and brains of newborn animals and could be having the same effects on human fetuses and young children.

Since the late 1990s, some experiments have found no effects at the doses of BPA that people are exposed to, while others suggest that it is estrogen-like and can affect the female estrus cycle and that it blocks testosterone and harms lab animals at low doses. Plastics industry representatives say that the trace amounts that migrate from some products pose no danger and are far below safety thresholds set by the EPA and other agencies.

In the new report, which was published online in Environmental Health Perspectives in April, scientists Frederick vom Saal and Claude Hughes said that as of December, 115 studies had been published examining low doses of the chemical, and 94 of them found harmful effects.

In an interview, vom Saal, a reporductive biologist at the University of Missouri-Columbia, said there was now an "overwhelming weight of evidence" that the plastics compound is harmful.

In their study, vom Saal and Hughes suggest an explanation for the conflicting results of studies: 100 percent of the 11 funded by chemical companies found no risk, while 90 percent of the 104 government-funded, nonindustry studies reported harmful effects.

One report, released by the Harvard Center for Risk Analysis last fall and funded by the American Plastics Council, concluded that "the evidence is very weak" that BPA has estrogen effects on males. The scientists assembled at Harvard reviewed the results of 19 experiments on male animals published before April 2002 and found no consistent findings.

However, vom Saal said the Harvard report was prepared before at least 60 new studies found harmful effects in lab animals, and it was too narrowly focused because it looked only at effects in males.

Steven G. Hentges, executive director of the polycarbonate business unit of the American Plastics Council, said that unlike the Harvard report, the new report listed numbers of studies and pieces of data without analyzing them to determine their strengths or weaknesses and whether they were relevant to human beings.

"The sum of weak evidence does not make strong evidence," Hentges said. "If you look at all the evidence together, it supports our conclusion that BPA is not a risk to human health at the very low levels people are exposed to. This paper does not change that conclusion. It has an opinion, not a scientific conclusion."

Polycarbonate plastics, which are useful in items such as baby bottles because they are durable, lightweight and shatter-resistant, cannot be made without BPA. The chemical, used in plastics manufacture for half a century, is not subject to any bans.

(By Marla Cone/Philadelphia Inquirer - 4/24/05)

INDOOR AIR QUALITY ORGANIZATIONS ANNOUNCE UNIFICATION AND CONSOLIDATION PLAN

Three leading trade organizations serving professionals in the indoor air quality industry have announced plans for the consolidation and unification of their programs and activities. The American Indoor Air Quality Council, Indoor Air Quality Association, and Indoor Environmental Standards Organization are all nonprofit organizations offering membership, certifications and other benefits to those working in indoor air quality professions. The Associations have an aggregate of more than 5,000 Members.

Under the new arrangements, the American Indoor Air Quality Council will continue to award IAQ related certification designations and to coordinate associated training programs. IAQA will serve as a membership association, and IESO will set standards. The next step in the association is to gain membership approval.

RT sees this unification and consolidation plan to be of considerable benefit to our professionals involved in indoor air quality and mold issues. The consolidation will provide less confusion to our clients and the general public. RT currently has a number of professionals with the Certified Microbial Consultant certification, and a number of our staff have additional indoor air quality certifications as well. We congratulate the organizations on their planned consolidation effort, which will help the public better understand who is and is not qualified for indoor air quality as well as mold assessment and abatement work.

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as "public purpose." See, e.g., *Fallbrook Irrigation Dist. V. Bradley*, 164 U.S. 112, 158-164. Without exception, the Court has defined that concept broadly, reflecting its longstanding policy of deference to legislative judgments as to what public needs justify the use of takings power. *Berman*, 348 U.S., at 26; *Midkiff*, 467 U.S. 229; *Ruckelshaus v. Monsanto Co*., 467 U.S. 986. Pp. 6-13.

• Petitioners' proposal that the Court adopt a new bright-line rule that economic development does not qualify as a public use is supported by neither precedent nor logic. Promoting economic development is a traditional and long accepted governmental function, and there is no principled way of distinguishing it from the other public purposes the court has recognized. See, e.g., Berman, 348 U.S., at 24. Also rejected is petitioners argument that for takings of this kind the Court should require a "reasonable certainty" that the expected public benefits will actually accrue. Such a rule would represent an even greater departure from the Court's precedent. E.g., Midkiff, 467 U.S., at 242. The disadvantages of a heightened form of review are especially pronounced in this type of case, where orderly implementation of a comprehensive plan requires all interested parties' legal rights to be established before new construction can commence. The Court declines to second-guess the wisdom of the means the city has selected to effectuate its plan. Berman, 348 , at 26. Pp. 13-20.

This case was being watched closely due to expected Philadelphia area condemnations needed for planned Pennsauken/North Camden area redevelopment projects. This decision clearly opens the way for expanded Brownfields site redevelopment projects. "Assemblage" of needed parcels for redevelopment schemes will now be made easier. Supreme Court Justice Sandra Day O'Connor, who will be leaving the bench soon, expressed fears that power to condemn could be misused.

Here in the Delaware Valley, Dick Saha who recently won a six year battle to fight to keep Coatesville, PA, from taking his farm, says that Justice Sandra Day O'Connor's fears that wealthy investors and city leaders are being the given the power to run people from their new homes to make way for development, is already here. In Mr. Saha's case, Coatesville decided they need Saha's property for a golf course.

Municipal and development officials say they are being unfairly cast as greedy land grabbers. Taking property isn't pleasant, they say, but sometimes it is the only way spur development in cities struggling to pay bills.

"The only way we can stay alive is to grow and revitalize", said Richard Monteilh, City Administrator, in Newark, NJ.

(Excerpts from Courier Post Article by Matt Apuzzo, 6/26/05.)

For more information, or to obtain a full copy of the decision, call Gary Brown (800-725-0593) or Joe Lang (856-467-2276) at RT. Decision excerpts were furnished to RT courtesy of Bruce Katcher, Esq. of Manko Gold, Katcher and Fox (610-660-5700).

RT STAFF AND PROJECT NEWS

As of early summer, RT's sales appeared headed for another record year, with the following Brownfields projects receiving considerable attention:

• At a Lancaster, PA site, RT prepared remedial cost estimates for a last, major phase, of a large former asbestos products mill being redeveloped.

• In northern New Jersey, landfill closure design work was underway, to help support future reuse of a major industrial facility, more than 300 acres in size.

• In Camden County, a closed landfill site was receiving much attention for mixed use commercial and industrial redevelopment, as the site is located at the intersection of two major transportation corridors.

• At a Willow Grove site, relocation of commercial "Big Box" facility is expected to allow large scale commercial redevelopment of a key downtown area.

RT Staff participating on the above projects include Joe Lang, Justin Lauterbach, Rob Carey, Keith Gerber, and Walter Hungarter.

• Justin Lauterbach was promoted to General Manager, of RT's New Jersey Office. Justin's experience with NJDEP cleanup sites make him well qualified for this position.

• Brian Havanki and Mike Bauer are working on a number of mold related assignments involving residences and commercial facilities. In addition, Gary Brown has been retained for two cases involving expert testimony as suspect microbial contamination was found following real estate transactions.

• Ben Shaw has joined Walter Hungarter's RT Engineering Group and is already at work with Larry Bily on a large Philadelphia PCB remediation project. Scott Hazelton is also assisting on the project, which involves soil and PCB impacted surface floor remediation, at a site being redeveloped for commercial and potential future casino use.

• Tony Alessandrini has work underway at two Brownfield sites - one at a former asbestos products mill boiler house in Ambler, and another, at a former stamping operation in Reading. Both projects involves site redevelopment.

• Gary Brown is working an expert case involving a North Jersey petroleum release, where the cost of remediation was excessive, well outside industry norms.

• Christina Konzc and Tom Donovan are busy on series of Phase I Environmental Site Assessment assignments, in both southeastern Pennsylvania and New Jersey.

• Chris Ward and Justin Lauterbach completed a number of projects involving vapor intrusion soil gas testing work. Vapor intrusion is receiving serious attention at solvent and petroleum release sites, nationwide.

We at RT appreciate the opportunities that clients are continuing to give us, as more, larger, and more important Brownfield assignments continue to be awarded to our firm. For each and every project, as always, we appreciate the opportunity to be of service.

PA UPDATES

DEP FORMALLY CHALLENGES EPA'S REVISED FINDING ON MERCURY EMISSIONS FROM POWER PLANTS

Environmental Protection Secretary Kathleen A. McGinty announced that Pennsylvania has filed a petition challenging the U.S. Environmental Protection Agency's decision to rescind a December 2000 regulatory finding that it is "appropriate and necessary" to regulate mercury emissions from coal - and oil-fired power plants as a hazardous air pollutant.

(PADEP Update - 4/1/05)

PENNSYLVANIA FACILITATES CLEANUP, SALE OF OLD TV GLASS FACTORY

The Commonwealth of Pennsylvania's top environmental official has forged an agreement with two private corporations that will ensure completion of environmental cleanup at the former Corning television glass manufacturing facility. The deal clears the way for a redevelopment project that will bring new jobs to the site in College Township, Centre County.

Environmental Protection Secretary Kathleen McGinty joined officials from Dale Summit Acquisitions and Corning Asahi Video Products Co. in announcing the buyer and seller agreement between Corning and Dale Summit.

Officials from Dale Summit Acquisitions announced they have closed on purchase of the site and are moving forward with plans to redevelop the former television glass manufacturing facility.

"The commitment of this administration is to work with community-minded business leaders, such as Dale Summit Acquisitions, to bring good jobs to former industrial sites like the former Corning Asahi plant, while at the same time making sure the necessary work is done to protect the health and safety of area residents," McGinty said.

Under Pennsylvania's Land Recycling Program, the agreement requires the seller to complete environmental cleanup to strict state standards before applying for liability relief, which is then passed to the new owner, assuring that the purchaser faces no cleanup liability. This removes a major hurdle that has impeded redevelopment projects.

"The buyer/seller agreement is a great facilitator for what we are doing here," said Daniel Hawbaker, a member of Dale Summit Acquisitions. "The availability of liability relief through the state's industrial sites reuse law and the ability of a buyer/seller agreement to speed the land sale process along are playing a major role in making this all possible."

Hawbaker said Dale Summit Acquisitions continues to talk with companies about locating on the site, which can house office, commercial and light industrial businesses. The Chamber of Business and Industry of Centre County is helping to market the former Corning Asahi site.

(Environment News Service - 6/6/05)

INSTITUTIONAL CONTROLS UNIFORM ENVIRONMENTAL COVENANTS ACT

More and more, so-called "institutional controls" are becoming both a useful and a used tool in the remediation of contaminated properties. In this context, the term "institutional controls" according to USEPA means non-engineered instruments, such as administrative and/or legal controls, which limit the potential for human exposure to contamination or which protect the integrity of an environmental cleanup. Examples of institutional controls would include deed covenants which restrict future uses of property, require the operation or maintenance of engineered controls to assure future effectiveness, or provide access to other parties to conduct remediation. Zoning provisions, building codes or permits, or consent agreements with regulatory agencies could accomplish similar ends. Deed notices or state registries are less prescriptive tools with similar objectives. Even fencing to limit access to contaminated areas can fall within this definition.

Like remediation actions such as treatment or removal of contamination, institutional controls reduce exposure to, and thus risk from, hazardous substances in the environment, but are often preferable to other alternatives which may be infeasible or too costly. Engineering and institutional controls may be used in combination to perform a remediation. For example it is not uncommon for a brownfield remediation plan to consist to redeveloping and paving most of a site (the engineering control) to prevent exposure to residual sub-surface contamination, along with establishing deed restrictions during conveyance which prohibit future site use for residential purposes and future site excavation below a specified depth without regulatory approval of an excavation plan (the institutional controls).

Institutional controls nevertheless present their own set of challenges. The questions relate to matters such as low are they tracked, how are future site owners or occupants provided notice about them, who enforces them, and how do they fit with traditional aspects of property law generally, such as the priority they receive relative to other interests in real property.

To address those issues, a few states have adopted, and others are considering adopting, the Uniform Environmental Covenants Act. See, e.g., House Bill No. 2226, General Assembly of Pennsylvania, introduced on Dec. 8, 2003. The Uniform Act was developed by the National Conference of Commissioners on Uniform State Laws through the same process the conference uses to develop model laws for states to use in any number of subject areas. A handful of states have introduced legislation based on the Uniform Act, and others are expected to follow.

So, for example, the Uniform Act provides that an "environmental covenant" does not affect a prior interest in real estate (such as a mortgage interest) unless the owner of that interest is a party to the covenant or affirmatively subordinates its interest. In the context of the Uniform Act, an environmental covenant is essentially defined as an agreement to abide by an institutional control as part of an environmental remediation project. As part of this definition, the remediation project would have to be conducted under an appropriate federal or state program, including a state-sanctioned voluntary cleanup program. Under the Uniform Act, this would essentially give the authority to enforce the covenant, including the specified institutional controls, to any relevant agency, relevant political subdivision, party to the covenant, party identified in the covenant, or other party with an affected interest in property.

An environmental covenant must identify itself as one; contain a legally sufficient description of the real property; describe the institutional controls to be implemented; identify the grantee; be signed by the relevant agency, real property owner(s), and grantees as a deed would be signed; identify the name and location of any administrative record for the relevant remediation project; and include any other information agreed to by the parties such as notification or reporting obligations, rights of access, or information on the contamination and its remediation. Under the Uniform Act, the environmental covenant "runs with the land", and is not invalidated on any number of grounds that might otherwise invalidate a deed covenant, such as that it is assignable, that it imposes a negative burden, or that the benefit or burden does not touch or concern real property. The covenant must be recorded in any county in which the property is located, and the recording can simply cross-reference by notice a property entry describing the covenant in a state agency-maintained registry. The covenant is perpetual unless amended, assigned or terminated according to prescribed, documented procedures.

While the Uniform Act is too recent to have been adopted on a broad scale yet, it would seem logical for more jurisdictions to adopt legislation based on this model law. Such a statute would resolve a number of uncertainties associated with institutional controls not otherwise supported by such a legal structure, and would therefore seem to serve not only environmental program interests, but the interests of lending institutions and real property owners generally. At this point, it would seem to be prudent for brownfields redevelopers, lenders, and other participants or representatives to be cognizant of the open questions which institutional controls present, and to address them as needed while confirming to evolving state law requirements.

(Ballard Spahr Andrews & Ingersoll Update on Environmental Issues Affecting Commercial Development - 2/22/05)

PENNSYLVANIA RECYCLED RECORD 4.4 MILLION TONS IN 2003

Pennsylvanians recycled a record 4.45 million tons of municipal waste in 2003, according to reports filed by Pennsylvania counties, Environmental Protection Secretary Kathleen McGinty announced. Aside from the environmental gains of diverting waste from landfills, the economic benefits of recycling are estimated at more than $68 million, and $240 million was saved in avoided disposal costs.

"Residents continue to show their commitment to ensure the health of Pennsylvania's environment and economy by taking advantage of more recycling opportunities," McGinty said during a tour of Blue Mountain Recycling in Philadelphia. "Families and businesses, churches and schools are sending millions of tons of recyclables to manufacturers to generate new products rather than sending materials to landfills or burning them."

"Because of the commitment made by Pennsylvanians, our recycling and reuse industry leads the nation in creating jobs and in sales," said McGinty.

PA UPDATES *(Continued)*

In 2003, the state diverted 4.45 million tons of municipal waste from disposal at landfills and waste-to-energy facilities. Municipal waste includes typical refuse from households, businesses, schools, and institutions as well as industry offices and lunchrooms.

The Commonwealth's recycling and reuse industry includes more than 3,200 establishments with total annual sales of $18.4 billion. The industry employs more than 81,000 people and has an annual payroll of $2.9 billion. The employment, payroll and sales numbers are greater than any other state in Northeast and are the second highest in the nation.

(Environment News Service - 4/21/05)

PHILADELPHIA SHIPYARD SIGNS $1 BILLION ECO-FRIENDLY TANKER DEAL

On the skids and headed for closure four years ago, Kvaerner's Philadelphia Shipyard announced a $1 billion deal to build 10 double hulled tankers and the formation of a new wholly owned, U.S. subsidiary that will charter the environmentally sound ships in the domestic shipping market.

The management team says the deal is the largest of its kind in American commercial shipbuilding. The ships will be chartered for at least five years at a cost of more than $500 million after delivery to Overseas Shipholding Group, Inc. and will be put to work to serve the Jones Act domestic shipping market. The 80 year old Jones Act requires that all cargo moved between U.S. ports be carried in U.S. built cargo ships.

Meehan said the new fleet of tankers will meet the international standards for double hulled tankers which must be in service by 2015, replacing an aging fleet of single hulled tanker vessels. He said the disastrous crude oil spill from a single-hull tanker in the Delaware River last year is a stark reminder to his team of the vital need for their new ships.

On the site of America's first naval base, completely rebuilt by Kvaerner to world-class specifications, company officials were also joined by Pennsylvania Governor Ed Rendell, Mayor John Street, Congressman Curt Weldon, and other local, state, and federal officials who came together under the red-white-and-blue banner, "Building the Future."

Brad Mulholland, the former president of Matson Navigation Company, Inc is serving as CEO of the new subsidiary. He said the new, MT-46 Veteran Class, 46,000 ton tankers will be among the most efficient tankers ever built.

The ship design is being provided through an exclusive, five year agreement with Hyundai Mipo Dockyard. The order includes an option for two additional tankers. It calls for the first delivery in 2006 and order completion by 2010.

(Environment News Service - 4/14/05)

PENNSYLVANIA VOTERS BACK $625 GROWING GREENER BOND ISSUE

At the polls in May, Pennsylvania voters showed strong support for a controversial $625 million environmental bond issue known as Growing Greener II.

The bond issue was the only statewide question on the ballot, added in April, after a compromise was worked out between Democratic Governor Ed Rendell, who lobbied for the measure and the Republican controlled Legislature, which has opposed it.

More than 60 percent of voters favored the bond issue. On the strength of that vote, the Rendell administration hopes to negotiate a bipartisan legislative measure that will allocate and pay for the bond.

The funds would be used for "maintenance and protection of the environment, open space and farmland preservation, watershed protection, abandoned mine reclamation, acid mine drainage remediation and other initiatives," according to the ballot statement.

The Green Party did not support Growing Greener II, saying the measure places the cost of cleaning up the environment on taxpayers instead of on polluters. Despite some controversy, most Pennsylvania conservationists did back the bond issue. In his statement of support Pennsylvania Environmental Council President Andrew McElwaine said, "We need to act now to protect Pennsylvania's quality of life. The longer we wait, the more clean streams, natural areas, working farms ad wildlife will disappear and be lost forever, and the more expensive it gets to clean up."

(Environment News Service - 5/18/05)

DISMANTLING PENNSYLVANIA'S LARGEST TIRE PILE TO COST MILLIONS

The Pennsylvania government has awarded two grants totaling $1.3 million to fund projects that will clean up the state's largest waste tire pile and create markets for the use of more than six million tires now located at a dump site in Greenwood Township, Columbia County.

"Today marks the beginning of a new era at the Starr Tire Pile," Secretary Kathleen McGinty said during an awards ceremony at the site last week. "The waste tires that have been accumulating on this site over the years will be removed."

"We began last year by forcing dozens of companies and individuals who dumped tens of thousands of tires there to begin removing them. The work will continue on a larger scale with these grants," McGinty said. "We are moving closer to eliminating this environmental and health hazard while creating jobs and spurring economic growth in Columbia County."

The General Assembly appropriated $6.8 million in the 2004-05 budget to the Department of Environmental Protection (DEP) for the cleanup of scrap tires, including $2 million secured by the local state senator and representative specifically for work at the Starr Tire Pile.

The DEP already has contacted more than 40 businesses that sent tires to the property to request removal. Twenty-one tire generators have refused to remove waste tires taken from their businesses years ago to the Starr tire pile. On January 26, DEP filed a Compliant In Equity in Columbia County Court to require each generator to remove its share of waste tires.

Seven of the 21 generators have removed a total of 24,700 tires from the site and DEP's Northcentral Region Office's Waste Management Program is negotiating agreements with three additional tire generators. The action could bring a civil penalty of $100 per day against any generator who fails to comply with the court's order.

The DEP, with legislative support, has been seeking ways to hasten the removal of millions of waste tires in Pennsylvania.

Processed tires can be used for high value products, including mats, playground surfaces or carpet underlayments. Tires also can be used for fuel or civil engineering projects such as lightweight backfill for walls and bridge abutments or for approved on-lot septic system installations. Whole tires can be used for erosion control, crash barriers and artificial reefs.

(Environment News Service - 5/31/05)

ABANDONED PENNSYLVANIA MINES PROVE DEADLY

Environmental Protection Secretary Kathleen McGinty warned Pennsylvanians about the dangers of trespassing in mines and quarries, issuing a warning to "stay out and stay alive" in response to three fatalities at abandoned mines lands in Pennsylvania this year.

Two riders on all-terrain-vehicles were killed last week in southwest Pennsylvania near Bentleyville at an area adjacent to Mittal Steel's former Ellsworth Mine coal refuse site, when they hit a vertical drop.

Mittal Steel has now erected a bright orange fence on its property near the vertical slope to Pigion Creek in an effort to keep potential trespassers from going over the edge of the cliff. Mittal Steel said the company has had problems keeping people off the old refuse site and has taken repeated action to keep trespassers away.

"Each year, there are dozens of fatalities and injuries at abandoned and active mines across the country, and already this year there have been three fatalities in Pennsylvania," McGinty said. "With summer fast approaching, we need to warn people that mines and quarries are not playgrounds, and that the hidden
dangers at these sites can kill you."

Secretary McGinty was joined for the announcement by local emergency responders and officials from the U.S. Mine Safety and Health Administration (MSHA) at a quarry in West Lebanon Township, Lebanon County. The quarry was the site of a fatality in 2003 when a 13 year old boy drowned after he fell while climbing. Due to the steep cliffs and dense vegetation at the site, emergency responders had to lower their boat into the quarry by ropes before attempting to rescue the boy.

Pennsylvania officials say that since 1989 there have been 40 fatalities at mines and quarries in 15 counties in Pennsylvania.

Governor Edward Rendell is lobbying Congress to re-authorize a federal mine reclamation fund and is attempting to direct some of that money to Pennsylvania.

The fund is supported by a tax on all coal mined in the United States and must be spent to reclaim coal mines before it can be used to reclaim abandoned quarries and other non-coal sites. The total cost to reclaim all abandoned mine sites in Pennsylvania is estimated at $15 billion.

"Pennsylvania has been blessed with great mineral riches, but the unregulated mining practices of the past have left us with some 250,000 acres of abandoned mine lands with unstable cliffs and spoil piles, water-filled pits, unmarked mine openings and dangerous, abandoned equipment and buildings," McGinty said. "Although these places may look inviting, they can kill you. Don't become another tragic statistic: stay out and stay alive."

(Environment News Service - 5/18/05)

TECHNOLOGY UPDATES

ACID RAIN STUNTS EASTERN FORESTS

A recent international scientific study on Russian soils raises concerns that acid rain may have serious implications for forest growth in the United States, particularly in eastern areas as the Adirondack and Catskill regions of New York according to the U.S. Geological Survey.

"We've known that acid rain acidifies surface waters, but this is the first time we've been able to compare and track tree growth in forests that include soil changes due to acid rain," and USGS scientist Greg Lawrence, who headed the study.

Conducted near St. Petersburg, Russia, the study showed that in about 50 years, acid rain had degraded a previously fertile soil to the point at which spruce trees could no longer maintain healthy growth rates.

"Poor growth rates such as these generally precede high mortality rates in the near future. The declining tree health has occurred despite a warmer and wetter climate in this region that would be expected to improve growth," Lawrence said.

These results have direct relevance to the United States, where large areas of eastern forests, such as the Adirondack and Catskill regions of New York, have soils that are likely to be more sensitive to acid rain than those studied in Russia.

Lawrence said that these findings broaden the question of recovery from acid rain beyond that of just surface waters. Details of the study were posted in the March online version of "Environmental Science and Technology Journal."

(Environment News Service - 3/18/05)

GLOBAL WARMING, SEA LEVEL RISE INEVITABLE, CLIMATE MODELS SHOW

Even if all greenhouse gases had been stabilized in the year 2000, we would still be committed to a warmer Earth and greater sea level rise in the present century, finds a new study by a team of climate modelers at the National Center for Atmospheric Research (NCAR). The findings were published in the March issue of the journal "Science."

The study, using a sophisticated computer modeling tool developed by federal and university scientists, quantifies the relative rates of sea level rise and global temperature increase that we are already committed to in the 21st century.

Even if no more greenhouse gases were added to the atmosphere, globally averaged surface air temperatures would rise about a half degree Celsius (one degree Fahrenheit) and global sea levels would rise another 11 centimeters (four inches) from thermal expansion alone by 2100.

"Many people don't realize we are committed right now to a significant amount of global warming and sea level rise because of the greenhouse gases we have already put into the atmosphere," says lead author Gerald Meehl. "Even if we stabilize greenhouse gas concentrations, the climate will continue to warm, and there will be proportionately even more sea level rise," Meehl warned. "The longer we wait, the more climate change we are committed to in the future."

The half-degree temperature rise is similar to that observed at the end of the 20th century, but the projected sea level rise is more than twice the three inch (five centimeter) rise that occurred from 1950 to 2000.

These numbers do not take into account fresh water from melting ice sheets and glaciers, which could at least double the sea level rise caused by thermal expansion alone.

The new study is the first to quantify future committed climate change using "coupled" global three-dimensional climate models. Coupled models link major components of Earth's climate in ways that allow them to interact with each other. Meehl and his NCAR colleagues ran the same scenario a number of times and averaged the results to create ensemble simulations from each of two global climate models. Then they compared the results from each model.

The scientists also compared possible climate scenarios in the two models during the 21st century in which greenhouse gases continue to build in the atmosphere at low, moderate, or high rates. The worst-case scenario projects an average temperature rise of 3.50C (6.30F) and sea level rise from thermal expansion of 30 centimeters (12 inches) by 2100.

All scenarios analyzed in the study will be assessed by international teams of scientists for the next report by the Intergovernmental Panel on Climate Change, due out in 2007.

(Environment News Service - 3/18/05)

ENVIRONMENTAL MERCURY, AUTISM LINKED BY NEW RESEARCH

For every 1,000 pounds of mercury released into the environmental in Texas counties there is a multiple-digit increase in the rate of autism, a study by researchers at The University of Texas Health Science Center at San Antonio has found.

The study compared mercury totals reported for 2001 in the 254 Texas counties to the rate of autism and special education services in nearly 1,200 Texas school districts. The districts, which range from urban to small metro to rural, enroll four million Texas children.

"The main finding is that for every 1,000 pounds of environmentally released mercury, we saw a 17 percent increase in autism rates," said lead author Raymond Palmer, Ph.D., associate professor in the Health Science Center's department of family and community medicine.

Autism is a developmental disorder that varies in severity in individuals and is characterized by impaired ability to engage in normal social behavior and by behavior patterns such as repetitive motions and sounds. Autism is estimated to occur in as many as one in 200 children and is reported to be rising in prevalence, although statistics vary.

Palmer and his team note that the new research "has implications for toxic substance regulation and prevention policies. The effects of differing state policies regarding toxic release of mercury on the incidence of developmental disorders should be investigated."

(Environment News Service - 3/18/05)

COCKROACH ALLERGENS WORST FOR CHILDHOOD ASTHMA

Cockroach allergen appears to worsen asthma symptoms more than either dust mite or pet allergens, according to new results from a three year nationwide study on factors that affect asthma in inner-city children.

This is the first large-scale study to show marked geographic differences in allergen exposure and sensitivity in inner-city children. Scientists found that most homes in northeastern cities had high levels of cockroach allergens, while those in the south and northwest had dust mite allergen levels in ranges known to exacerbate asthma symptoms.

"These data confirm that cockroach allergen is the primary contributor to childhood asthma in inner-city home environments," said Kenneth Olden, Ph.D., director of the National Institute of Environmental Health Sciences (NIEHS). "However, general cleaning practices, proven extermination techniques and consistent maintenance methods can bring these allergen levels under control."

NIH provided $7.5 million to researchers at the University of Texas Southwestern Medical Center at Dallas and seven other research institutions, including a Data Coordinating Center at Rho, Inc., for the study.

"We found that a majority of homes in Chicago, New York City and the Bronx had cockroach allergen levels high enough to trigger asthma symptoms, while a majority of homes in Dallas and Seattle had dust mite allergen levels above the asthma symptom threshold," said Dr. Rebecca Gruchalla, associate professor of internal medicine and pediatrics at the University of Texas Southwestern Medical Center and lead author of the study.

"We also discovered that the levels of both of these allergens were influenced by housing type," noted Gruchalla. "Cockroach allergen levels were highest in high-rise apartments, while dust mite concentrations were greatest in detached homes."

While cockroach allergen exposure did produce an increase in asthma symptoms,

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researchers did not find an increase in asthma symptoms as a result of exposure to dust mite and pet dander.

The researchers recommend that people reduce their exposure to cockroach allergen by eating only in the kitchen and dining room, putting non-refrigerated items in plastic containers or sealable bags, and taking out the garbage on a daily basis. Other measures include repairing leaky faucets, frequent vacuuming of carpeted areas and damp-mopping hard floors, and regular cleaning of counter tops and other surfaces.

This study was part of the larger Inner-City Asthma Study, a cooperative multi-center project comprised of seven asthma study centers across the country. The goal of the study was to develop and implement a comprehensive, cost-effective intervention program aimed at reducing asthma incidence among children living in low socioeconomic areas.

The study was funded by NIEHS and the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institute of Health. The study results are published in the March issue of the "Journal of Allergy and Clinical Immunology."

(Environment News Service - 3/8/05)

FOUR NEW ITRC DOCUMENTS ADDRESS SOIL AND GROUNDWATER REMEDIES

The Interstate Technology and Regulatory Council (ITRC) has recently released four technical guidance documents to the environmental community. ITRC documents are developed by multidisciplinary and consensus-based teams that receive input from states, federal agencies, industry, academia and citizen stakeholders.

Technical and Regulatory Guidance for In Situ Chemical Oxidation of Contaminated Soil and Groundwater, 2nd Edition.

Characterization, Design, Construction and Monitoring of Mitigation Wetlands.

Environmental Management at Operating Outdoor Small Arms Firing Range.

Overview of Groundwater Remediation Technologies for MTBE and TBA, developed by ITRC's MTBE and Other Fuel Oxygenates team.

All of these documents are available on the ITRC Web site.

(Remediation Weekly - 3/28/05)

NANOBACTERIA IN CLOUDS MAY SPREAD DISEASE AROUND THE WORLD

The scientist who discovered that dust in interstellar space and in comets is largely organic, now says that nanobacteria in clouds are responsible for spreading illnesses such as kidney stones, heart disease, and HIV around the world.

Professor Chandra Wickramasinghe of Cardiff University says in a recent article in the Journal of Proteome Research that these ulta-tiny organisms are wide-spread on land and in the atmosphere, and that they play a crucial role in the spread of disease.

Nanobacteria are the smallest known self-replicating bacteria, about 100-fold smaller than regular bacteria. At 30-100 nanometers in size, they are smaller than any other known bacteria, and are even smaller than many viruses. A nanometer is one billionth of a meter.

Co-author Dr. Andrei Sommer of the University of Ulm, Germany agrees that nonobacteria are indicated in the formation of kidney stones, heart disease, and HIV. Both scientists say the scientific community is slowly recognizing the role of nanobacteria in these diseases.

"Experiments have shown that nanobacteria are excreted from the body in urine and their dispersal from the ground into the atmosphere and stratosphere appears to be inevitable," said Dr. Sommer.

In humans, nanobacteria have now been identified on four continents, the two scientists say.

Nanobacteria are of great interest to the scientific community because of their dual nature, the scientists write, "on the one hand, they appear as primal biosystems originating life; on the other hand, they can cause severe diseases."

They say nanobacteria are now accepted as being widely prevalent in the terrestrial environment and that they have compelling evidence for the existence of these nano-organisms, even in the stratosphere, one of the atmosphere's highest layers.

The scientists maintain that the occurrence of nanobacteria in clouds could disperse infective agents globally, and might also play a prominent role in "the nucleation of cloud drops."

"This happens because nanobacteria, lifted from the ground by winds, could transit between the high humidity region of the clouds and the relatively dry inter-cloud regions, leading to oscillations between a dormant state and one of activation," explained Wickramasinghe.

"Remnants of a sticky protein coating nanobacteria makes them act as extremely efficient cloud condensation nuclei, with a tendency to aggregate to clusters upon contact," he said.

Their work corroborates the findings of Ruprecht Jaenicke, of the Institute for Atmospheric Physics at Mainz University, Germany, on bioaerosols - airborne contaminants - and proteins in the atmosphere reported in "New Scientist" and "Science."

(Environment News Service - 4/11/05)

CLIMATE CHANGE MAY ALTER WINTER USE OF ROAD SALT

Salting and sanding roads in the Northeast is a routine part of winter, but changes in climate patterns caused by global warming may alter the established policies on snow removal, incurring higher costs, influencing road safety and impacting the environment, says a Penn State geographer.

Funded by the U.S. Environmental Protection Agency, Tawan Banchuen is study climate change's effect on winter road maintenance, including environmental and economic effects.

"I am working with the Consortium for Atlantic Regional Assessment on a case study in New York State's Adirondack Park that investigates many aspects of climate change and land use change on local communities," Banchuen, a graduate student in geography, told delegates to the American Association of Geographers meeting Wednesday in Denver.

Adirondack Park is six million acres in Upstate New York, about the size of the state of Vermont, occupied by 130,000 people year round, but visited by several million each year. The area encompasses Lake Placid, home of two Olympics, and many other small towns and is the largest protected area in the United States.

Forty percent of the area is preserved, and 52 percent has been harvested and is currently managed. Banchuen is investigating the use of salt and sand on both federal highways and local roads and tracking where the sand and salt end up. Banchuen would eventually like to model the climate change and consequent precipitation changes to see how it affects the amounts of salt and sand needed and how that affects the environment and economy.

"After the 1980 Lake Placid Olympics, the communities in the park promised to follow a bare pavement policy in winter," he said. "Typically, state roads use mostly salt and local and town roads use sand. Salt is more expensive."

Salt has many potential impacts on lakes. Increased salt concentrations can cause a lake to stratify into lighter and denser layers. While this often happens in the summer with temperature gradients, the salt could prevent the water from remixing in the fall. Circulation would stop or slow, and oxygen would not mix into the lower layers of the lake. With oxygen depletion come fish kills and releases of heavy metals in the sediment. Saltier water would also favor salt tolerant plants and animals and decrease the diversity in the lake.

Outside the lake, increased road salt can kill vegetation at roadsides. Road salt damages automobile undercarriages and bodies. Salt can also seep into the groundwater drinking supply. Sand increases the load of suspended particles in streams and lakes. It also creates a clean-up problem on the sides of the road.

(Environment News Service - 4/7/05)

EXTREME WEATHER EVENTS AFFECTED BY CHANGES IN VEGETATION

A climatologist with the Purdue Climate Change Research Center has found that vegeta-

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tion can affect extreme weather, a discovery that could add a new piece to the global warming puzzle.

In the first study to indicate that as vegetation responds to climate change, those responses affect extreme weather events, Noah Diffenbaugh has found that storms and heat waves can vary in frequency and severity depending on how vegetation responds to global warming.

While climate scientists have theorized that this relationship exists, Diffenbaugh said, this study gives credence to the idea that interactions among land, air and sunlight are more complex than previously thought.

"Earth's climate is all about relationships, and this study show that ground cover plays a significant part in determining changes in climate extremes," said Diffenbaugh, who is an assistant professor of earth and atmospheric sciences in Purdue's College of Science.

"We are accustomed to hearing that greenhouse gases affect climate, but they are not the only factor we should consider. Our climate models also must incorporate the effect of vegetation if they are to capture the full scope of reality," he said.

Diffenbaugh said he conducted the research, which appears in a May issue of the journal Geophysical Research Letters, because extreme climate events are one of the most important variables in human interaction with the environment.

Using a climate model at the University of California-Santa Cruz, where he was previously a postdoctoral researcher, Diffenbaugh conducted a study on California, Oregon, Nevada and parts of the surrounding region.

Diffenbaugh said that whether vegetation feedbacks make for more or fewer extreme events depends on the region.

"Changes in vegetation cover can push the region toward more or fewer extreme events - it depends on where you look," he said. "In the high Sierra Nevada, for example, people have often theorized that as the globe warms, evergreen forests will migrate to higher altitudes and be lost as they hit the mountaintops. We certainly see this warming and the predicted forest loss."

"But we also see that as the forests disappear, the higher elevations may not experience as much extreme warmth as expected because environmental feedbacks the new vegetation generates may mitigate this net warming."

In future research Diffenbaugh would like to devote enough computer time to determine how extreme climate events respond to vegetation changes on the scale of decades or centuries. This research was sponsored in part by the National Science Foundation and the David and Lucile Packard Foundation.

(Environment News Service - 5/10/05)

U.S. GREENHOUSE GASES RISE MORE SLOWLY THAN GROWTH

U.S. greenhouse gas emissions grew 13 percent over the 13 years from 1990 to 2003, a period during which the U.S. economy grew by 46 percent, according to a report to the United Nations submitted by the State Department on April 27.

Total U.S. emissions of greenhouse gases were 6,900 million metric tons of carbon dioxide equivalent in 2003, said the report, an inventory produced by the U.S. Environmental Protection Agency (EPA) of greenhouse gases in the United States that are directly attributable to human activities.

The major finding in the 2005 report is that emission s increased by 0.6 percent from 2002 to 2003, even though 2003 emission levels stayed below 2000 levels.

According to the EPA, the increase was due mainly to moderate economic growth in 2003, which increased demand for electricity and fossil fuels.

Fossil fuel combustion was the largest source of U.S. emissions, accounting for 80 percent of total emissions.

"The drivers in the United States tend to be things like electricity generation and the weather from year to year," said EPA environmental engineer Lief Hockstad. "As the economy grows there's a greater demand for electricity generation, for example, and a greater demand for fossil fuels."

(Environment News Service - 5/4/05)

TOXIC CHEMICALS FOUND IN HOUSEHOLD DUST ACROSS USA

There are many hazardous chemicals in common household dust and they are making Americans sick, says a coalition of nine environmental organizations. An analysis of dust in 70 U.S. homes released today shows theat particles from detergents, packing materials, textiles, computers and cosmetics, among many other ordinary objects, can be hazardous to human health.

The study, "Sick of Dust: Chemicals in Common Products - a Needless Health Threat in Our Homes," is the first in the United States to look at a wide range of chemicals used in computers, cosmetics, upholstery, pesticides and other products. All the chemicals tested are legal despite the fact that they are internationally recognized as toxic or harmful to the immune and reproductive systems.

In the first nationwide tests for brominated flame retardants in dust swiped from computers, two of the groups in the Computer Take-Back Campaign and Clean Production Action found these neurotoxic chemicals on every computer sampled. The highest levels found were a form of polybrominated diphenyl ethers (PBDEs) called deca-BDE, one of the most widely used fire retardant chemicals in the electronics industry.

These results indicate that there is exposure to certain brominated flame retardants and that computers are likely to be a source of deca-BDE exposure in the dust of homes, offices, schools, and businesses.

All exposures, no matter how small, are of concern because deca-BDE is a bioaccumulative substance. This means that multiple exposures to low levels of deca-BDE add up over time and build up in the body.

This report finds that computer manufacturers can prevent unnecessary risks by using safer alternatives that meet stringent fire standards in the United States and are less harmful to human health and the environment.

Read "Sick of Dust" at:
www.safer-products.org.

(Environment News Service - 3/22/05)

RAILROADS WORK TOWARDS FUEL EFFICIENCY, CLEAN AIR

The nation's major freight railroads are joining with the U.S. Environmental Protection Agency (EPA) in a partnership aimed at reducing locomotive fuel consumption and emissions.

These freight railroads - BNSF Railway Company, Canadian National Railway Company, Canadian Pacific Railway, CSX Transportation, Kansas City Southern, Norfolk Southern Corporation and Union Pacific Railroad - transport more than 90 percent of all domestic rail freight.

The agreement was announced May 25 in the U.S. Capitol building by Jeffrey Homstead, assistant administrator of the EPA's Office of Air and Radiation. "The rail companies joining the SmartWay Partnership are helping to clean the air, improve our nation's energy security, and continue to ensure the strength of the U.S. economy," he said.

Association of American Railroads President and CEO Edward Hamberger said, "This agreement is a sign of our commitment to build on that strong foundation so that we become even greener."

"Railroads are already the most fuel efficient way to move freight across the country, and are continually working to make the industry even greener," according to the Association of American Railroads (AAR).

SmartWay is a voluntary partnership that establishes incentives for fuel efficiency improvements and reduction of greenhouse gas emissions.

By 2012, this initiative aims to reduce fuel consumption by as much as 150 million barrels of oil and emissions by as much as 66 million metric tons of carbon dioxide and 200,000 tons of nitrogen oxides.

There are three elements to the SmartWay program. The first is a set of partnerships between EPA, freight transportation companies and

TECHNOLOGY UPDATES *(Continued)*

shippers to improve the environmental performance of freight operations.

The second element is the reduction of engine idling at such locations as truck stops, ports, rail yards and distribution hubs; and the third aims for increased efficiency and use of rail and intermodal operations.

As part of the SmartWay Transportation Partnership, each railroad will develop a plan to identify fuel savings and emission reduction strategies. Strategies include reducing idling, improving aerodynamics, applying new fuel-savings technologies, and installing emissions control devices.

Union Pacific Railway, Canadian Pacific Railway and BNSF Railway all are operating or have ordered Green Goat ® locomotives, a hybrid locomotive that reduces fuel consumption and atmospheric emissions by 60 percent and emits 80 to 90 percent fewer pollutants than conventional train engines.

A variety of other technologies - including onboard computers, distributed power, and low friction bearings - are also being utilized to improve fuel efficiency and reduce emissions.

(Environment News Service - 6/1/05)

NEW CANCER RISK GUIDELINES FROM THE EPA

The U.S. Environmental Protection Agency (EPA) in March released new guidelines for assessing cancer risk from exposure to environmental pollutants. In the works for years, the two documents are supposed to guide EPA scientists in their investigations.

"These guidelines will help us apply the most up-to-date science and to incorporate new science as it becomes available in assessing the risks associated with environmental exposures to carcinogens," said Acting Assistant Administrator for the Office of Research and Development Tim Oppelt. "EPA's guiding principle is that our cancer risk assessments be public health protective."

One set of guidelines describes possible approaches that EPA could use in assessing cancer risk exposures to children from 0 to 16 years of age. This marks the first time that a guidance specifically related to children has been issued. It includes a review of existing scientific literature on chemical effects in animals and humans.

The young people's guidance summarizes the result of the cancer studies that investigated early life exposure, EPA's analysis of those studies, and analysis to strengthen the scientific basis for adjusting from studies conducted in adults to children.

The agency says this document is consistent with the National Research Council's 1994 recommendation that "EPA assess risks to infants and children whenever it appears that their risks might be greater than those of adults."

(Environment News Service - 3/30/05)

PROGRAM TESTS STORMWATER TREATMENT TECHNOLOGIES

Recent advances in stormwater pollution treatment technologies have presented municipal stormwater managers with a vast array of product choices, but often with competing and contradictory technology specifications and product claims. Such technological differences can perplex even the most experienced manager when considering which product is ideally suited to treat urban runoff problems in one's community. Luckily, help is on the way in the shape of a formal stormwater treatment technology verification system.

In 1998, an agreement between the EPA and NSF International (NSF) of Ann Arbor, MI, was established to provide verification testing of commercially ready technologies with applications specific to urban runoff. This agreement fell under the auspices of the ETV Wet Water Flow Pilot, which is part of the EPA's Environmental Technology Verification Program or ETV. In 2002, the Pilot was combined with the Source Water Protection Pilot to form the Water Quality Protection Center (WQPC).

The ETV program began in 1995 with the sole mission of evaluating the performance of environmental technologies and products in all media: air, water, soil, ecosystems, pollution prevention, and monitoring. The ETV WQPC is a voluntary public/private testing partnership where manufacturers of stormwater treatment technologies volunteer to have their products independently tested.

At the core of the testing is the Stormwater Source Area Treatment Technology Protocol, which standardizes the testing procedures and parameters. At present, NSF is responsible for implementing the protocol development and testing system. Earth Tech Inc., under contract to MSF, wrote the monitoring protocol in a cooperative effort with the Wisconsin Department of Natural Resources and the U.S. Geological Survey.

Protocol in Action

At present, the practical implementation of the protocol involves both final results and ongoing analysis from three stormwater treatment systems running at three different sites in Wisconsin. The first system is the Arkal Filtration System which is a pressurized stormwater filtration system. It is located at St. Mary's Hospital in Green Bay, WI, and is treating runoff from 5.5 acres of parking and rooftops. The Arkal system has a flow-splitter (houses both the inlet and bypass pipes) and a 9,200 cu. ft. holding tank designed to carry runoff generated from a 2-year, 30-minute duration event. The manufacturer claims 80 percent of suspended solids greater than 5 microns will be removed.

The second stormwater treatment technology is installed near the Milwaukee River in Milwaukee, WI, to treat 0.23 acres of freeway runoff. This site employs a Vortechs' stormwater treatment system, which is a hydrodynamic device designed and manufactured by Vortechnics Inc. The specific model being analyzed is the Vortechnics 1000 which has three chambers to control totals suspended solids (TSS), floating oil, and debris in runoff with a design flow rate of 1.6 cfs.

Pollutants are captured in several chambers. The grit chamber is controlled by an orifice designed to pass smaller flows equivalent to the 2-month storm. Larger storms flow over the top of the grit chamber into the middle chamber. The vendor claims that flow patterns into the chamber create swirling actions helping sediment to drop out. The manufacturer also claims that 80 percent of the suspended solids greater than 250 microns will be removed.

A third site using a product manufactured by Stormwater Management Inc. Is located adjacent to the Vortechs site in Milwaukee. The StormFilter relies on a filtration process for pollution removal.

Final analysis from both the Arkal product and the StormFilter are complete and posted on the EPA web site. In fact, independent verification under the protocol has determined that the Arkal system has met and in some cases exceeds the manufacturer's claims. The StormFilter product achieved a reduction of 46 percent TSS loading, and 92 percent reduction of the suspended solids concentration (SSC).

While results from such testing should not be considered an endorsement of the manufacturer's product, they should be viewed as a comparative guide when considering one product versus another. Results from verification testing of the Arkal and StormFilter system can be found at the NSF International web site: www.nsf.org/business/water_quality_protection_center/reports.asp?prog.

The Verification Report on the Vortechs device is expected to be complete in 2005.

Moving Forward

As the ETV WQPC program continues to advance, it is likely that the final protocol document will undergo revisions as more products are tested. Indeed, NSF is accepting testing applications from vendors who wish to participate in the ETV.

Additional information regarding the protocol and the ETV program can be found at: www.epa.gov/etv/verifications/vcenter9-9.html.

(By James A. Bachhuber, P.H., Earth Tech Inc., WaterWorld - 5/05)

FEDERAL REGULATORY UPDATES

EPA MAY REVAMP VAPOR INTRUSION TESTS FOR SOIL, WATER POLLUTANTS

EPA officials are discussing plans to raise the thresholds for triggering investigations of public health risks from indoor air pollutants that stem from groundwater and soil contamination beneath residential and industrial buildings, according to EPA sources and documents.

While EPA lacks authority to regulate indoor air, the agency is seeking to address vapors that seep indoors from contamination soil and groundwater under buildings, known as vapor intrusion. In 2002, EPA unveiled a draft guide, Guidance for Evaluating Vapor Intrusion to the Indoor Air Pathway From Groundwater and Soils, which included a screening test to determine whether there is a complete pathway from under the buildings into the structure. The agency uses the guidance to prioritize sites for further investigation, one EPA source says.

According to a recent EPA presentation, the agency is proposing a slew of changes to the 2002 guidance, including lowering their estimates, known as attenuation factors, for how much of the vapor seeps inside, increasing the number of variables regulators must consider in assessing the likelihood of vapors entering a structure; increasing the number of technologies available to assess vapor pathways; and allowing regulators to consider a site's future use when assessing potential vapor intrusion risks.

The additional variables EPA is considering include the type of building foundation, chemical-specific attenuation factors and different layers of soil under the building. The 2002 draft guidance only considered the depth of the groundwater where the vapors originate from and the types of soil the vapors must pass through to seep into the building.

Agency officials are discussing the changes in an effort to finalize later this fall a screening test called for in a controversial guidance on assessing vapor intrusion risks. In the past few weeks, agency staff have briefed state officials and industry representatives on their plans in an effort to receive feedback on the possible revisions.

The guidance is important because if the screening test shows vapor entering the building pose a significant risk, the agency could require additional risk assessments and possible remediation under the Superfund program.

But the draft guidance drew strong criticism from industry groups, which raised concerns that the screening test was overly protective, in part because it allowed regulators to include background, or pre-existing, indoor air contamination in assessing threats from any vapor intrusion.

The changes EPA is considering would raise the threshold for concluding that the vapors represent a likely threat of human health. According to the EPA source, the agency believes the changes would create a more accurate view of vapor intrusion's actual risks. The agency will "do a better job of accurately assessing sites [where] vapor intrusion will likely pose a problem," the source says.

The agency made the presentation to state officials at a May 11-12 meeting of the Interstate Technology & Regulatory Council and made a similar presentation to military officials and contractors during an April 11 session of the Joint Services Environmental Management Conference in Tampa, FL.

One environmentalist familiar with the issue says that while EPA should try to improve its approach to vapor intrusion, the agency should still "err on the side of protection" and investigate any site where vapor intrusion could be a problem. "I don't place enough confidence in modeling" to discount sites based on attenuation estimates, the source says. Even though such an approach makes sense for prioritizing sites, the agency should eventually sample everywhere there is a chance to exposure, the source adds.

(Superfund Report - 5/23/05)

EPA ABANDONS SEWAGE BLENDING PLAN

The Bush administration shelved a controversial plan in May that would have relaxed existing sewage treatment regulations and allowed the discharge of large volumes of partially treated wastewater into lakes and rivers across the nation.

The announcement signaled a rare victory for environmentalists, who contend the policy would roll back the Clean Water Act and harm public health and the environment.

"This decision is a critical step toward stopping sewage from being released in waterways around the country," said Christy Leavitt, clean water advocate for the U.S. Public Interest Research Group. "The EPA should take this opportunity to further protect our waters by ensuring and enforcing full treatment for all sewage."

The proposal, announced in November 2003, centered on a practice known as "blending," which allows operators to mix fully treated sewage with partially treated sewage and storm water and bypass secondary treatment, releasing the blend directly into the environment.

Primary units at sewage treatment plants separate and remove solids from wastewater. Secondary units, also known as biological treatment units, break down the remaining solids and kill most of the viruses, parasites and other pathogens present in sewage.

The blending practice allows operators to divert wastewater around secondary treatment units and blend it with treated sewage. The mixture is then disinfected and discharged into the nation's waterways.

The practice is currently permitted only when there is no feasible alternative, usually when large volumes of wastewater - often storm water caused by heavy rainfall or snowmelt - exceed the capacity of secondary treatment units.

The Bush administration's proposal would have allowed wastewater treatment plants to use the practice virtually any time it rains.

Ben Grumbles, EPA's assistant administrator for the Office of Water, said that after a review of 98,000 public comments and several congressional hearings, the agency determined blending is "not a long-term solution."

Our goal is to reduce overflows and increase treatment of wastewater to protect human health and the environment," Grumbles said in a prepared statement. Grumbles said the EPA would continue to work with all stakeholders to review other alternatives.

(Environment News Service - 5/19/05)

FEDERAL UPDATES

EPA WEIGHS CONCERNS OVER TENANT LIABILITY UNDER BROWNFIELDS LAW

EPA may develop guidance or take other steps to resolve questions over the liability status of tenants who rent from bona fide prospective purchasers (BFPP) as defined in the 2002 brownfields law, agency enforcement officials told a recent conference.

While the brownfields law signed by President Bush exempts BFPPs who met certain criteria from Superfund liability, the law is unclear on how that exemption applies to tenants, said Paul Connor of the agency's Office of Enforcement & Compliance Assurance (OECA) at the RTM Communications Contaminated Property Transactions conference in Washington, DC, on April 6.

The issue "has come up more often than it has not," Connor told attendees. "It's come up enough that we are deciding whether or not to do something."

The confusion stems from the language of the statue, which exempts BFPPs from Superfund liability if they exercised due diligence before buying contaminated property and took other steps. Section 222(a) of the law defines a BFPP as "a person (or tenant of a person) that acquires ownership of a facility after the date of the enactment of this paragraph."

But it is unclear whether BFPP status automatically transfers to a tenant at a contaminated site. In addition, industry lawyers have raised questions over what happens to tenants if a BFPP loses that status, and conversely, what happens to the BFPP if the tenant does something that threatens the liability exemption. "We're aware this is a problem," OECA attorney Helen Keplinger told the conference.

Among the agency's options are: developing a fact sheet addressing some of the questions; developing a model "comfort" letter for tenants that clarifies their legal status; or developing a guidance, according to an EPA official. However, the agency is presently working to identify the issues and is "not on a particular path," the official says.

At the conference, EPA officials also warned contaminated property owners that the agency and state officials would be checking to ensure that land-use restrictions – known as institutional controls (ICs) – at contaminated sites are being implemented properly. "I would recommend you take the initiative" to make sure ICs are working properly, Connor told attendees.

ICs include zoning, building or excavation permits, well drilling prohibitions, and deed restrictions, such as easements.

(Superfund Report - 4/25/05)

BI-PARTISAN $140 BILLION ASBESTOS TRUST FUND BILL FLOATED

A bill to end the ordeal of litigation over

FEDERAL REGULATORY UPDATES *(CONTINUED)*

asbestos injury and death claims was introduced in the U.S. Senate by Senator Arlen Specter of Pennsylvania, chairman of the U.S. Senate Judiciary Committee. The product of months of meetings and mediation with industry stakeholders, the legislation is designed to provide compensation to asbestos victims without litigation.

Under this legislation, the federal government would establish a national trust fund that would be privately funded by asbestos defendant companies and insurers, with no liability by the United States government.

The trust fund, administered by the Department of Labor, would be available to claimants who meet the medical criteria for the asbestos related cancer mesothelioma or other diseases caused by asbestos exposure.

The total dollar amount for the fund is set at $140 billion. If the fund is unable to pay all claims, victims will also have the option to return to the tort system to seek compensation. If there is a reversion to the tort system, suits may be filed in federal court, the state court in which the plaintiff resides, or in the state court where the asbestos exposure occurred.

(Environmental News Service - 4/21/05)

EPA CITES STATE LAWS TO PUSH 'BIG THREE' ON VOLUNTARY MERCURY PLAN

EPA is citing growing state efforts to require auto companies to pay for removing mercury switches from millions of vehicles that will soon be scrapped in an effort to restart stalled talks on establishing a voluntary national program for preventing mercury releases, EPA and other sources say.

The talks – which include the Big Three automakers, the American Iron & Steel Institute (AISI), the Institute of Scrap Recycling Industries and environmental groups, including Environmental Defense and the Michigan-based Ecology Center – stalled after the auto companies balked at recommendations from the other groups that they should pay for conducting outreach and removing switches, according to EPA, environmental group, and industry sources.

The auto manufacturers believe auto dismantlers and the steel mills reusing the steel should pay to remove the equipment, the sources say.

However, sources with some industry and environmental groups say EPA may face a tough time winning a deal from the automakers. The sources say the last talks on the issue occurred last year, and they have not seen the automakers change their stance on funding switch removal.

One industry source says a push by high-level EPA managers asking the automakers to compromise reportedly failed, although EPA has not given up on seeking to establish a voluntary national program.

Auto manufacturers used light switches containing mercury in auto trunks, hoods and braking systems until 2002. One environmentalist says removing mercury switches from vehicles that are smelted could reduce mercury emissions dramatically because the switches contain roughly one gram of mercury each, and there are an estimated 100 million of them still in use today.

Auto industry representatives did not return calls seeking comment. But the EPA source notes that auto manufacturers are under no legal obligation to remove the switches. As a result, the automakers contend they have done all they are legally required to do, especially since they stopped using mercury switches three years ago.

The EPA source says the agency is pressing for the national approach because steel mills are expected to soon receive peak flow of scrap vehicles containing mercury switches, and EPA wants a program in place to prevent the resulting mercury releases. A regulatory approach would take years to develop and would likely lead to lengthy litigation, forcing the agency to miss a key window for reducing mercury air emissions, the source says.

(Superfund Report - 4/25/05)

FIRST-TIME APPELLATE RULING BARS PRIVATE PARTIES' RCRA SUITS AGAINST U.S.

A federal appeals court has, for the first time, ruled that the waiver of sovereign immunity under the Resource Conservation and Recovery Act (RCRA) does not allow private parties to sue federal agencies to recoup cleanup costs and damages stemming from environmental contamination.

The court ruled that the waiver that Congress provided in 1992 in the Federal Facilities compliance Act (FFCA), which amended RCRA, only allows states to sue federal agencies.

An attorney for the plaintiffs in the case says if the ruling is allowed is allowed to stand, it could limit the ability of purchasers of formerly used defense sites to recover cleanup costs for undetected hazardous waste contamination. The attorney says the losing plaintiffs are considering asking for a rehearing.

However, an industry attorney who specializes in RCRA says the statue has rarely been construed as providing a right of recovery for private parties, and it would be "a little bizarre" to subject the federal government to such suits.

The U.S. Court of appeals for the 1st Circuit's May 3 ruling in Marina Bay Realty Trust, et al., v. United States of America appears to settle years of contradictory opinions on RCRA's sovereign immunity provisions at the district court level.

The case centers on a dispute over environmental restoration costs at a former naval air station in Quincy, MA. The Navy disposed of the property in 1956. But soon after real estate developer Peter Gordon purchased the property in 1997, he discovered the Navy had left behind two underground oil storage tanks, one of which had corroded and released its contents into the soil.

In 2000, a group of Gordon-owned companies sued the Navy in federal district court in Massachusetts, seeking recovery of nearly $310,000 for cleanup costs and $2.2 million for increased construction and financing costs. The plaintiffs claimed the Navy was liable for damages under the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, and that the federal government had waived its immunity from prosecution under state law in RCRA's section 6001(a), which Congress added in the FFCA.

The district court dismissed the plaintiffs' RCRA claims, and later ruled against other claims brought under the Federal Tort Claims Act The plaintiffs appealed.

In its ruling, the 1st Circuit conceded that `RCRA's language is ambiguous on the issue of sovereign immunity to private suits for reimbursement of response costs. The sovereign immunity waiver waives the federal government's immunity against substantive or procedural requirements "including, but not limited to, any injunctive relief, administrative order or civil or administrative penalty or fine . . . or reasonable service charge," the appellate ruling says, quoting language in RCRA.

(Superfund Report - 5/9/05)

GAO REPORT ON BROWNFIELD REDEVELOPMENT

The Government Accountability Office (GAO) was asked to obtain stakeholders' views on EPA's contribution to brownfield cleanup and redevelopment, determine the extent to which EPA measures program accomplishments and obtain views on options to improve or complement EPA's program.

The report, available at www.gao.gov, found that EPA's Brownfields Program supports the initial stages of site redevelopment by funding activities that other lenders often do not, such as identifying contamination and cleaning up sites. The impact of EPA's funding is difficult to isolate because it is often combined with funds from other sources.

EPA's current performance measures do not measure major components of the Brownfields Program, such as progress toward cleaning and redeveloping sites or assisting state programs. Furthermore, EPA has not yet developed measures to assess the extent to which the program achieves key outcomes, such as reducing or controlling health and environmental risks.

Stakeholders identified three options for improving or complementing EPA's Brownfields Program:

1. Eliminating the provision in the Brownfields Act that, in effect, disqualifies from grant eligibility those landowners who purchased a brownfield site before January 2002.
2. Changes to the stringent technical and administrative requirements that they believe have discouraged the use of revolving loan funds.
3. A federal tax credit for developers' remediation costs that could attract developers to brownfield sites on a broader national basis.

(Brownfield News - 4/08/05)

EPA REJECTS RECOMMENDATION TO ADOPT NATIONAL CLEANUP STANDARDS

EPA Superfund officials are rejecting an agency staff recommendation to develop national cleanup standards for some of the most commonly found contaminants at hazardous waste sites, saying it would violate agency policy and clash with state regulations.

The decision is one of dozens included in an agency report that details the actions EPA is taking

FEDERAL REGULATORY UPDATES *(CONTINUED)*

to conserve resources in the cash-strapped Superfund program, including: reviewing the effectiveness of existing cleanup plans; exploring the use of generic remedies for some cleanup scenarios; and conducting a comprehensive review of the adequacy of hazardous waste financial assurance requirements.

EPA advisers last year made a host of recommendations for streamlining the program in Superfund: Building on the Past, *Looking to the Future*. The report, commonly known as the 120-day study because EPA staff were given 120 days to create it, was commissioned by then-acting Deputy Administrator Stephen Johnson in 2003 to determine how to increase the pace of cleanups conducted under Superfund, also known as the Comprehensive Environmental Response, Compensation & Liability Act (CERCLA). Cleanup activity at many sites has lagged in recent years due to budget constraints.

In its February response to the report, The 120-Day Study Action Plan, the Superfund board of directors rejected a recommendation in the original report that EPA develop national standards and action levels for five or 10 of the most commonly encountered contaminants in soil and sediment at sites across the country. The recommendation was intended to conserve resources by eliminating the need to determine cleanup levels on a site-specific basis, as the agency currently does.

But the Superfund board of directors – which was created at the urging of the 120-day study and includes the heads of waste and enforcement offices – says national standards would violate agency policy for determining clean-up plans, and could clash with state regulations.

(Defense Environment alert - 3/22/05)

BUILDING OWNERS CHALLENGED TO BECOME ENERGY STARS

Commercial and institutional buildings use about $80 billion worth of energy each year and contribute about 20 percent of U.S. greenhouse gas emissions, according to figures released by the U.S Environmental Protection Agency (EPA).

In March, the agency joined with a dozen large national organizations and seven states to challenge the owners of commercial and institutional buildings to improve their energy efficiency by 10 percent or more using Energy Star solutions. Energy Star is the federal certification system for energy efficient products and building operations.

The EPA offers its national building energy performance rating system to support this challenge. This rating system has already been used to assess the energy efficiency of almost 20,000 buildings across the country.

The agency estimates that if each building owner met the challenge, in 10 years they would reduce greenhouse gas emissions equivalent to the emissions from 15 million cars while saving about $10 billion each year.

Some of the large organizations challenging owners are active in their own field, such as the American Hotel & Lodging Association, the Building Owners and Managers Association International, and the Real Estate Roundtable.

(Environmental News Service - 3/15/05)

EPA WRESTLING WITH GUIDE FOR ESTIMATING INSTITUTIONAL CONTROL COSTS

EPA is struggling to develop guidance for estimating the costs of long-term remedies for contaminated sites, known as institutional controls (ICs)), because of the lack of data on IC use and competing state and industry concerns that the cost estimates could be manipulated to shift implementation costs, according to EPA officials.

Estimating IC costs is "not an easy nut to crack and we've struggled a bit with it," one EPA official familiar with the guidance says.

The source says the guidance, once released, "will probably be a bit of a lightning rod" because of industry concerns that cost estimates could be manipulated to mandate more cleanup and local concerns that the estimates could be used to pass IC maintenance costs on to state and local governments.

ICs consist of legal or physical barriers, such as zoning restrictions, fencing an groundwater management zones, to control the use of contaminated properties. They are used in lieu of, or in addition to, traditional cleanup, which is often more expensive to conduct.

Following a recommendation from the Senior Cleanup Council, which is comprised of the directors of the nation's cleanup programs, EPA is developing the guidance to ensure there are sufficient resources for maintaining ICs, in light of state and local government concerns that they have been forced to pay in perpetuity to implement and enforce the remedies, EPA sources say.

But EPA officials say they have struggled to determine ICs costs because there is no current, effective methodology for estimating IC costs. In addition, EPA and others have little experience in estimating IC costs, since regulators and others are just now launching efforts to develop cost estimation methods.

EPA'S guidance, which is intended for use by site managers, will include information on: the full life-cycle of various ICs, including all of the steps and likely costs associated with implementing, monitoring, enforcing and shutting down such remedies as zoning changes, easements and groundwater management zones, the EPA source says. The guidance will also provide geographic information so that the varying costs of implementing ICs in different areas of the country can be estimated.

(Superfund Report - 6/6/05)

EPA TO STRENGTHEN PROTECTION FROM LEAD IN DRINKING WATER

EPA recently initiated a Drinking Water Lead Reduction Plan to strengthen, update and clarify existing requirements for water utilities and states to test for and reduce lead in drinking water. This action, which follows extensive analysis and assessment of current implementation of these regulations, will tighten monitoring, treatment, lead service line management and customer awareness. Th plan also addresses lead in tap water in schools and child care facilities to further protect vulnerable populations.

"We need to free people from worrying about lead in their drinking water," said Benjamin H. Grumbles, EPA Assistant Administrator for Water. "This plan will increase the accuracy and consistency of monitoring and reporting, and it ensures that where there is a problem, people will be notified and the problem will be dealt with quickly and properly."

From 1995-2004, states have concluded 1,753 enforcement actions to ensure compliance with the Lead and Copper Rule (LCR), and EPA has concluded 570. Under the Safe Drinking Water Act, state agencies take a lead role in enforcing the LCR.

More information on National Review of LCR Implementation and Drinking Water Lead Reduction Plan is available online at : http://www.epa.gov/safewater/lcrmr/lead_review.html.

(Env. Tip of the Week - 3/14/05)

EPA NOT TO CHANGE NSR EQUIPMENT REPLACEMENT PROVISION

The U.S. Environmental Protection Agency (EPA) has determined that th equipment replacement provision (ERP) of the new source review (NSR) permitting program should be maintained as adopted in 2003, several environmental and public interest organizations, as well as a group of states, petitioned EPA for reconsideration of certain aspects of it. The agency granted reconsideration and requested comment July 1, 2004, on the legal basis for the ERP and the basis for selecting the cost threshold (20 percent of the replacement cost of the process unit) to determine if a replacement is routine.

Although EPA is not changing any aspect of the ERP, the agency has clarified its positions in support of the provision, including the legal basis and support for selecting 20 percent for the cost criterion.

(Env. Compliance Alert - 6/9/05)

ADVANCED TECHNOLOGY WILL TEST REAL-WORLD TRUCK AND BUS EMISSIONS

Testing highway diesel truck and bus emissions will be more accurate, less expensive, and more effective under a new in-use testing program announced today by EPA. Using state-of-the-art technology, the program will ensure EPA's stringent emission standards are met under real-world driving conditions and deliver increased public health benefits. This program is the result of unprecedented cooperation involving EPA, the California Air Resource Board (ARB), and diesel engine manufacturers.

While vehicles from a selected sample of typical trucks and buses are in operation, portable measuring devices attached to the engine will assess exhaust emissions of hydrocarbons, carbon monoxide, nitrogen oxides, and that calls on manufacturers to recruit volunteer test vehicles from fleets or individual owners. The program will expand nationwide starting with 2007 model year diesel trucks.

Prior to this program, testing diesel engine emissions required removal of the engine from the

FEDERAL REGULATORY UPDATES *(CONTINUED)*

truck and testing in laboratories. These former testing procedures were more cumbersome, less accurate and more expensive. This new program also brings this successful partnership to the research and development arena with the initiation of a new development program to further demonstrate and refine the portable emission measurement technology.

In a companion action also announced, EPA is revising the test procedures to reflect current state-of-the-art portable emission measurement technology. This rule also creates unified testing requirements for all engines that will streamline laboratory efforts for EPA and industry.

For more information on the testing program, visit: http://www.epa.gov/otaq/hd-hwy.htm#inuse. For information on the companion action, visit: http://www.epa.gov/otaq/hd-hwy.htm#tech .

(USEPA - 6/3/04)

ENERGY PRODUCERS WANT FEDERAL RULES ON GREENHOUSE GAS

Cinergy Corp., Excelon Corp. And General Electric Co. Are among U.S. companies with an unlikely message for President Bush on global warming: Please regulate us, at least a bit.

A growing chorus of utilities, manufacturers and investors is asking the Bush administration for a clear federal standard on emissions of so-called greenhouse gases, such as carbon dioxide, that could affect the world's climate. The companies contend the administration's current approach provides little guidance for them on how to map strategies for expansion.

"We want this issue addressed sooner rather than later because we have to start building new power plants," said John Stowell, who oversees environmental strategy at Cinergy, of Cincinnati. "It's tough to move into a billion-dollar-plus building program without knowing what the rules of the road" will be.

The quest for federal action reflects company concerns that the government eventually will step in anyway, perhaps under a president more eager then Bush to regulate.

Moreover, in the absence of federal action, some states, including California and New York are moving to adopt their own standards, raising the prospect that companies will be faced with multiple sets of rules that will increase compliance costs.

"The business community is ahead of the politicians on this, no question," said economist Jeffrey Sachs, a United Nations adviser and head of the Earth Institute at Columbia University, which studies environmental issues. "Markets can't manage this on their own; they need guidance."

Since taking office in 2001, bush has rejected a mandatory limit on greenhouse gases and questioned the science behind the Kyoto Protocol, an international agreement on global-emission standards that the United States has refused to join. Instead, he has touted a system of voluntary reductions of gas emissions, incentive measures, and "market-based" programs.

The pressure for a federal standard has less to do with science than with economics, said Winston Hickox, a portfolio manager for environmental initiatives at the California Public Employees' Retirement System.

"The investment community, almost above all else, abhors uncertainty," he said. "It's a risk that can't be quantified, and that's where government can provide one of its better services."

While federal lawmakers are considering several proposals for climate-change legislation, both with and without provisions requiring cuts in greenhouse emissions, none has gotten far.

The call for federal action is being piked up by the investment community. American International Group Inc., the world's biggest insurance company, is considering whether it should invest only in companies "doing something" about climate change, said Joe Boren, president of the New York's firm's environmental arm.

Swiss Re, the Zurich company that is the world's second-largest insurer, is warning customers about liability risks associated with greenhouse gases and extreme weather, said Chris Walker, head of its Greenhouse Gas Risk Solutions unit.

(By Kim Chipman - Phila., Inquirer - 6/7/05)

FINAL EPA STAFF PAPER RECOMMENDS STRONGER PARTICLE POLLUTION STANDARDS

A key document in EPA's review of national air quality standards for particle pollution recommends the administrator consider strengthening and refining current standards to better protect public health and visibility. Based on the latest science, the "final staff paper" does not change current air quality standards. It does, however, contain EPA staff recommendations for the administrator to consider in upcoming decisions about revising the agency's national standards for fine (PM2.5) and coarse particles (PM10).

The Clean Air Act requires EPA to periodically review air quality standards to ensure they provide adequate health and environmental protection and to update those standards if necessary. In December 2004, EPA and states began implementing the first fine particle standard when the agency designated areas of the country that require additional local, state and federal steps to reduce PM 2.5.

While acknowledging remaining uncertainties, the staff paper concludes that the latest scientific, health and technical information about particle pollution supports strengthening EPA's current health-based standards for fine particles. The paper recommends approaches for doing so.

The staff paper recommends that EPA continue to regulate but revise the current PM10 standards with a new health-based standard for particles known as "thoracic coarse" particles – particles between 2.5 and 10 micrometers in diameter that can be deeply inhaled. Staff recommends that such a standard apply to more toxic urban coarse particles.

In addition to the changes to improve public health protection, the staff paper recommends that the administrator consider revising the existing secondary fine particle standard to improve protection of visibility in urban areas.

The assessments, conclusions, and recommendations included in the staff paper are staff judgments. They do not represent agency decisions on the PM standards. The agency is required by a consent decree to issue a proposal regarding the particle pollution standards by December 20, 2005, and to issue a final rul by September 27, 2006.

To read the final staff paper, a fact sheet, and related materials, go to:
http://www.epa.gov/ttn/naaqs/standards/pm/s_pm_index.html

(EPA News - 7/1/05)

EPA SETS EMISSION STANDARDS FOR STATIONARY DIESEL ENGINES

As part of a nationwide effort to control fine particle and ground level ozone pollution, the U.S. Environmental Protection Agency (EPA) proposed emission standards for stationary diesel engines.

Stationary diesel internal combustion engines are used to generate electricity and operate compressors at facilities such as power and manufacturing plants. They are also used in emergencies to produce electricity and pump water for flood and fire control.

The proposed standards, known as New Source Performance Standards, will reduce harmful emissions of nitrogen oxides, particulate matter, sulfur dioxide, carbon monoxide, and hydrocarbons from new, modified, and reconstructed stationary diesel internal combustion engines.

The standards will subject stationary diesel engines to the same levels required by EPA in the nonroad diesel engine rule.

As proposed, the rule will affect 81,500 new stationary diesel engines and result in total pollutant reductions of over 68,000 tons in 2015.

Emissions reductions will occur gradually from 2005 to 2015, reaching reductions of 90 percent or more from baseline levels in some cases. EPA estimates the total nationwide annual costs for the rule to be $57 million in the year 2015.

EPA will accept comments on this proposed rule for 60 days following publication of the proposed rule in the Federal Register.

(Env. News Service - 7/1/05)

EPA CLARIFIES INDUSTRIAL STARTUP, SHUTDOWN AND MALFUNCTION REQUIREMENTS

Through proposed regulatory clarifications, EPA is emphasizing that affected industries must minimize emissions during their facilities' startup an shutdown, or at times when equipment is malfunctioning. The proposed clarifications would amend a rule known as the "General Provisions." The General Provisions require facilities to develop plans that outline how they will operate to minimize emissions during times of startup, shutdown and or malfunction. Providing they minimize emissions at all times, the proposed amendments would allow a facility to alter the plan on a limited basis. Facilities must maintain these plans on site and must report to their state or local permitting authorities that they have complied with the plans. EPA will accept comment on this proposal for 45 days after it is published in the Federal Register. For more information on this action, visit:
http://www.epa.gov/ttn/oarpg/t3/fact_sheets/genprov_fs.html

(EPA News - 7/2/05)

NJ REGULATORY UPDATES

NEW JERSEY CENTRALIZES REGIONAL ENFORCEMENT OFFICES

The environmental enforcement offices for the northern and metro regions of New Jersey are being consolidated in a single office in the Cedar Knolls section of Hanover Township, Morris County.

Department of Environmental Protection Commissioner Bradley Campbell visited DEP's new Hanover Township office on Thursday to announce the consolidation of DEP's northern and metro regional enforcement offices.

The new office will serve Bergen, Essex, Hudson, Passaic, Morris, Sussex, Warren, Hunterdon and Somerset counties.

"The consolidation of the northern and metro offices will save taxpayer funds and improve coordination between DEP staff currently housed in those offices," said Campbell.

The new office is located near Routes 287 and 10, so it provides DEP inspectors and emergency responders improved access to major highways and will enable them to more easily serve the nine northern counties.

To contact DEP programs housed in the new office, call the following telephone numbers:

• Air Compliance & Enforcement (973) 656-4444

• Emergency Response (973) 631-6385

• Site Remediation Field Operations (973) 631-6401

• Solid & Hazardous Waste Enforcement (973) 656-4470

• Water Compliance & Enforcement (973) 656-4099

The consolidated northern-metro office complements DEP regional enforcement offices service central and southern New Jersey located in the Robbinsville section of Washington Township and in Camden City.

(Environment News Service - 3/21/05)

DELAWARE RIVER BASIN COMMISSION DESIGNATES THE LOWER DELAWARE RIVER A "SPECIAL PROTECTION WATER"

The Delaware River Basin Commission (DRBC) has classified the Lower Delaware River as Special Protection Waters. Wastewater project approvals in the 76 mile stretch of the Delaware River between the Delaware Water Gap Recreation Area and Trenton, New Jersey are now substantially more difficult to obtain. These new protections also apply to all tributary waters discharging into the Lower Delaware,, including the Lehigh River, Musconetcong River, and Lake Hopatcong.

The Special Protection Water designation is designed to prevent measurable degradation of water quality and improve water quality where practicable. New restrictions for current and future discharges to the Lower Delaware and its tributaries include:

• No permits for new or expanded discharges will be issued until all non-discharge and load reduction alternatives have been fully evaluated and rejected due to technical or financial infeasibility.

• Applicants for wastewater treatment project approvals must prove that using natural wastewater treatment technologies are either technically or financially infeasible.

• New and expanding wastewater treatment projects must meet the "Best Demonstrable Technology" treatment standard.

• New projects will not be approved unless there is a Non-Point Source Pollution Control Plan for the project area.

• Subsequent connections to new project systems will only be allowed where the service area is regulated by a DRBC approved Non-Pont source Pollution Control Plan.

These regulations supplement the existing Pennsylvania and New Jersey State requirements (i.e., both State and DRBC regulations apply to discharges in the affected area). The DRBC has adopted the new designation as a temporary resolution effective January 19, 2005. Final action is to be taken by September 30, 2005.

For a map showing affected portion of the Delaware River Basin see:
http://www.state.nj.us/drbc/LDproposed_stream_class.pdf

(Stevens & Lee Environmental News Alert - 3/14/05)

NEW JERSEY LAW MAKES MERCURY SWITCH RECYCLING MANDATORY

New Jersey Acting Governor Richard Codey has signed legislation that helps reduce mercury emissions by establishing a program to remove mercury switches from vehicles prior to melting them for scrap metal. This new program will address one of New Jersey's largest remaining sources of mercury contamination.

"Today, New Jersey takes another important step to improve the health of our citizens and protect our environment from mercury," said Codey. "The switch removal program will lower the exposure of pregnant women and children to harmful mercury emissions, reduce the levels of mercury that build up in fish caught by our local fishermen, and aid the state's iron and steel melters in complying with New Jersey's mercury regulations."

Despite ceasing to use mercury switches in cars sold in Europe as early as 1992, U.S. auto manufacturers continued to install switches containing mercury in convenience lights and anti-lock braking systems prior to 2003.

The New Jersey bill requires all scrap yards to remove mercury switches from vehicles before sending the scrap metal to iron and steel mills, where the mercury would otherwise be released into the air when the vehicles are melted down and recycled.

New Jersey joins Maine and Arkansas to become the third state in the nation to have mandatory collection and recovery programs for mercury switches.

Under the legislation, the vehicle recyclers or scrap yards will receive a minimum of 42 from the major auto manufacturers for each switch they remove. The auto manufacturers also are responsible for establishing a program for the safe final disposal of the switches.

NJ REGULATORY UPDATES

Pennsylvania is sponsoring a voluntary program that offers $1 per mercury switch recycled.

(Environment News Service - 3/28/05)

NJ MAKES CONTAMINATED LAND DESIRABLE

What would make a developer in New Jersey seek out an abandoned industrial property with an unknown degree of contamination?

The state hopes such decisions will be influenced by a stale source of funding, incentives to develop brownfields and a web of regulations that stand in the way of attaining and developing ostensibly less problematic undeveloped land.

"Why go out and build on a greenfield, when you can go out on a brownfield and clean it up," asked Caren Franzini, chief executive officer of the New jersey Economic Development Authority.

"If we are going to encourage development in smart growth areas, we have to give developers the tools to do that."

In April, more tools arrived in the form of $45.8 million in funding for brownfield redevelopment freed up through legislation signed by Gov. James E. McGreevey. The bill also provided an ongoing, stable source of funding of between $15 million and $20 million annually for future brownfields redevelopment.

Through three separate state funds, developers now have access to $1 billion for brownfield remediation projects, said New Jersey Department of Community Affairs Commissioner Susan Bass Levin. As a result, the estimated 10,000 brownfield sites statewide, once avoided by developers, are now being sought out.

New Jersey's efforts to preserve its remaining open space, pushed in the administration's smart growth campaign has added to the cost and difficulty of acquiring and developing greenfields, which have lost favor among developers, said Mike McGuinness, executive director of the New Jersey chapter of the National Association of Industrial and Office properties.

"They are just fewer and further between, and the prices today are up in all areas. And there are really no incentives to develop green spaces – there are certainly no financial incentives to do that," said McGuinness, who said local municipal policies and ordinances add to the difficulty of developing green spaces.

Brownfields have become more attractive because available state and federal assistance have also helped to remove the financial risk once associated with the projects, McGuinness said.

-By Athena D. Merritt, Philadelphia Business Journal

NJ REGULATORY UPDATES *(Continued)*

NJDEP FINES DEVELOPER, ENGINEER, AND CONSULTANT FOR FALSIFYING FRESHWATER WETLAND APPLICATION

The Department of Environmental Protection (DEP) fined a developer and two land use professionals a total of $738,000 for falsifying information in a freshwater wetland permit application for the proposed 155-unit Twin Brooks Village adult community in Tinton Falls. The applicants withheld information in an effort to develop wetland areas protected under the Freshwater Wetlands Protection Act.

"This penalty sends a clear signal to land use professionals willing to submit false or misleading information to DEP: you will be punished," said Commissioner Bradley M. Campbell. "In too many cases, lawbreaking consultants have used false submittals to conceal risks and to skirt the requirements of the law."

Gregory S. Blash & Associates, Air, Land And Sea Environmental Management Services, Inc. And Twin Brooks Village, LLC., in November 2004 jointly submitted an application for a letter of interpretation and freshwater wetland transition area waiver.

The application failed to identify approximately 107,000 square feet of obvious freshwater wetlands, freshwater wetland transition areas, and State open waters on the site of the proposed development. The permit application proposed the c9onstruction of parking lots, roads and condominiums within protected natural resource areas such as a 5,000 square foot pond and extensive freshwater wetlands.

DEP on February 17 issued a notice of violation to each respondent for failing to identify in the application all features which would be relevant to determining compliance with the Freshwater Wetlands Protection Act. The applicant, Twin Brook Village, LLC, withdrew the application for the development on March 23, 2005. The respondents may request a hearing to appeal DEP's penalty assessment within 20 days.

In a related enforcement action, DEP fined the project's surveyor, John P. Houwen of B&B Hi-Tech Solutions, Inc., $41,000 for failing to identify pertinent on-site freshwater wetlands and State open waters.

SIXTY NEW JERSEY CLEANUP STAR PROJECTS APPROVED IN YEAR ONE

New Jersey Department of Environmental Protection Commissioner Bradley Campbell today announced approval of 60 remedial projects under the new Cleanup Star program during its first year of operation. The program is designed to expedite remedial work at less complex contaminated sites in the state.

"The Cleanup Star program allows testing and cleanup work at a low-risk site to move quickly so that properties can be put to productive use," said acting Governor Richard Codey. "The Cleanup Star consultants help DEP move sites through the remedial process avoiding any delays for developers and other parties."

The program allows designated consultants to oversee and fully manage investigation and cleanup work normally performed by a limited number of DEP project managers.

NEW JERSEY WILL SUE EPA OVER NEW MERCURY RULE

New Jersey Attorney General Peter Harvey and Department of Environmental Protection (DEP) Commissioner Bradley Campbell announced in March that new Jersey will file suit against the new federal Environmental Protection Agency (EPA) mercury rule. "The rule fails to protect the public adequately from harmful mercury emissions," the officials said.

"We will file suit to challenge EPA's new rule, which fails to protect our citizens from the grave threat posed by mercury emissions," said Harvey. "Mercury has been linked to neurological disorders and is especially dangerous for young children and pregnant women. By authorizing emissions trading, EPA's rule will allow some power plants to actually increase mercury emissions, creating hot spots of mercury deposition around those plants."

New Jersey is consulting with other northeastern states impacted by mercury emissions and will petition for review of the rule to demand that the EPA implement a strong, protective rule as required by the Clean Air Act.

The EPA mercury rule lets coal-fired power plants trade credits under a cap-and-trade system instead of being required to comply with a strict Maximum Achievable Control Technology (MACT) standard, as required b the Clean Air Act.

The MACT standard would reduce mercury emissions to levels approximately three times lower than the cap established in this EPA rule, said Harvey and Campbell.

Fish from waters in 45 of th 50 states have been declared unsafe to eat as a result of poisoning from mercury. In New Jersey, there are mercury consumption advisories for at least one species of fish in almost every water body of the state.

(Environmental News Service - 3/15/05)

CLEAN AIR RULE EXPECTED TO CUT NEW JERSEY AIR POLLUTION

The U.S. Environmental Protection Agency (EPA) today finalized a rule that is projected to reduce the amount of pollution coming into the Garden State from other states and reduce pollution emissions in New Jersey.

EPA Acting Administrator Stephen Johnson signed the final Clean Air Interstate Rule (CAIR) in March.

CAIR will permanently cap emissions of sulfur dioxide (SO2) and nitrogen oxides NOx) in the eastern United States.

When fully implemented in 2015, CAIR will reduce SO2 emissions in 28 eastern states and the District of Columbia by more than 70 percent and NOx emissions by more than 60 percent from 2003 levels, the agency said.

"CAIR will result in the largest pollution reductions and health benefits of any air rule in more than a decade," said Johnson. "The action we are taking will require all 28 states to be good neighbors, helping states downwind by controlling airborne emissions at their source."

"Each and every state must do its part to reduce air pollution because air pollution knows no boundaries," said Kathleen Callahan, EPA acting regional administrator. "Part of the challenge faced by states like New Jersey is that a significant amount of pollution impacting the state comes from other states. This rule goes a long way toward addressing that problem."

At the end of 2004, 13 New Jersey counties were designated as not attaining EPA's fine particle standard. Johnson says CAIR will hel0p bring all of these counties into attainment by 2010.l;

In addition, 21 New Jersey counties were designated nonattainment for EPA's smog standard, and CAIR is expected to reduce smog levels in all of these counties.

(Environmental News Service - 3/10/05)

NEW JERSEY RECYCLING PLAN SEEKS TO BOOST LAGGING RATES

Recycling of solid waste in New Jersey is declining, say worried state officials who see landfills overflowing with recyclables.

The municipal solid waste stream recycling rate in 2003 stood at 32 percent, down from a high of 45 percent in 1995.

In an attempt to fix the problem, the state Department of Environmental Protection (DEP) has written a new solid waste management plan that focuses on boosting recycling rates across New Jersey.

The municipal solid waste stream recycling rate stood at 32 percent, down from a high of 45 percent in 1995.

Commissioner Bradley Campbell released the first update to the state's solid waste management plan since 1993 at the Association for New Jersey Recyclers annual meeting held last week in Mansfield, Burlington County. The Plan prioritizes waste reduction and recycling.

"Recycling is not optional in New Jersey - it's the law," said Campbell. "The new plan documents a troubling decline in New Jersey's recycling rates, planning and enforcement issues and inadequate funding that all require serious attention."

Campbell proposed specific measures to manage the 20 million tons of waste generated in New jersey each year. In order to meet the state's goal of recycling 50 percent of the municipal solid waste stream, an additional 1.7 million tons of material must be recycled based on current statewide rates.

The new plan quantifies this estimate not only on a statewide basis, but also by what is required from each county. The plan also includes an estimate of the statewide increase needed in terms of tonnage by material, such as newspaper, corrugated cardboard and food waste.

All 21 counties will be required to update their solid waste management plans to reflect the new

NJ REGULATORY UPDATES *(Continued)*

initiatives in the state plan. Each county will have to adopt a new plan within 270 days of formal adoption of the statewide solid waste management plan.

The county plans will have to identify local strategies to achieve the recycling tonnage target identified for each county and include methods for public promotion of new opportunities and methods for enforcing local recycling mandates.

The county plan updates will identify the county and municipal programs responsible for enforcement of the recycling mandates, specify the minimum number of recycling inspections that will be undertaken annually and detail penalties to be imposed for noncompliance.

While the Clean Communities and Recycling Grant Act currently provides up to $4 million a year for municipal and county recycling programs, local entities require additional long-term, stable funding, Campbell notes.

DEP will host a meeting in each county to brief county solid waste and recycling officials on the details of the plan and to answer questions and gather direct input.

The new plan aims to expand recycling opportunities for various materials at schools, multi-family housing complexes, and small and medium sized businesses. The DEP will conduct a recycling initiative in late May or early June to educate the public and school age children on the importance of recycling in the state.

DEP will hold two public hearings on the proposed update of the solid waste management plan to accept formal comments - meeting dates and times to be announced.

In 2003, New Jersey generated 19.9 million tons of solid waste, which includes construction debris and scrap iron. Of that total, 10.4 million tons or 52 percent was recycled with 9.5 million tons sent for disposal.

New Jersey's recycling industry employs more than 27,000 people in the state, and generates more than $5.9 billion annually.

A copy of the proposed plan is available at the DEP's website at: www.state.nj.us/dep.

(Environment News Service - 4/5/05)

NEW JERSEY TO ISSUE RULES SETTLING INDUSTRY SUIT OVER NRD CAMPAIGN

The state of New Jersey will issue a series of regulations associated with its unprecedented natural resource damages (NRD) enforcement campaign in exchange for industry dropping a legal challenge to the initiative, according to a recent state document obtained by Superfund Report.

State officials and industry have closely watched the campaign, which the state's Department of Environmental Protection (DEP) announced in 2003, with industry fearing that other states could launch similar efforts.

DEP notified dozens of companies in 2003 that it intended to pursue thousand of claims under state law for groundwater contamination throughout the state. State and federal trustees are allowed to pursue such claims for damages to natural resources resulting from the release of hazardous substances. The claims – which can cost millions of dollars – are in addition to the cost of remediating contamination. No other state plans a series of regulatory proposals "to improve the current [NRD] campaign."

"These elements include: the preference for restoration projects in lieu of monetization of damages; methodologies for scaling compensatory restoration remedial actions based on injury; methodologies for short-form assessment; the role of use and non-use values in valuation and scaling; addressing the limited ability to pay of small businesses; and categories of claims where the costs to recover exceed any likely public compensation," the letter from Deputy Attorney General Richard F. Engel states. "With regard to this last element, the Department expects to include specific regulatory definitions for exclusion of claims against residential homeowners and small businesses."

The rulemakings, which will be subject to public notice and comment, will be conducted in exchange for New Jersey industry groups dropping their 2004 lawsuit against the campaign. The suit charged that a formula for assessing NRD claims over groundwater that the state was threatening to use against non-settlers was unlawful because it had not been subject to public review.

DEP did not return a call about the settlement, but DEP Commissioner Bradley Campbell told Superfund Report last year that the state was not required to submit the groundwater formula for public comment because it was an enforcement matter (Superfund Report, Feb. 16, 2004, p16).

At the time the suit was filed, some industry officials had said it would make it more difficult for individual companies to challenge the state's claims because the formula would be more easily defensible if it had been publicly reviewed. A state court last year rejected another argument contained in the suit, that the state's use of outside attorneys on a contingency basis was unlawful.

An industry attorney says the forthcoming regulations will provide "some certainty [of] what the program is going to look like."

(Superfund Report - 4/11/05)

PRESERVATION OF LANDFILL SPACE ACT UNDER CONSIDERATION

A Senate Bill in New Jersey called the Landfill Space Act, is focused on minimizing the consumption of landfill space in New Jersey. The Act would impose requirements in the use of packaging to encourage the use of recycled materials. Sponsored by Senator Bob Smith, the Bill would propose specific requirements, for example, rigid plastic packaging containers would have to have at least a 50 percent recycled content, by January 1, 2006. There are also requirements for product and packing manufacturers, requiring them to take all feasible action to ensure the recycling or reuse of rigid plastic packaging containers, and to enhance the development and expansion of markets for post consumer recycled plastic.

FEDERAL REGISTER NOTICES

http://www.epagov/homepage/fedrgstr

Environmental Protection Agency
Extension of the Deferred Effective Date for 8-hour Ozone National Ambient Air Quality for Early Action Compact Areas. Proposed Rule.
(Federal Register - 6/8/05)

Environmental Protection Agency
Air quality implementation plans; approval and promulgation; various States: Pennsylvania.
(Federal Register - 6/16/05)

Environmental Protection Agency
National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters: Reconsideration.
(Federal Register - 6/27/05)

Environmental Protection Agency
Availability of Additional Information Supporting the Proposed Rule To Include Delaware and New Jersey the Clean Air Interstate Rule, and Reopening of Comment Period for the Proposed Rule.
(Federal Register - 6/28/05)

PADEP WASTE REDUX PROGRAM TAKES A BOW

In June, the Pennsylvania Department of Environmental Protection announced the results of its Waste Redux effort, started by DEP Secretary Katie McGinty in response to concerns from many Pennsylvanians that environmental gains could be accomplished by increasing recycling and beneficial use of materials. The Waste Redux effort was headed by Steve Socash, Chief of the Bureau of Municipal and Residual Waste, and Mike Forbeck, a DEP Manager from the Southwest Region, who has long experience in DEP's Waste Management Programs. Gary Brown, President of RT Environmental Services, participated on DEP's residual waste subcommittee; the subcommittee is an advisory group to DEP that helped guide the process.

Improvements to help facilitate the recycling and beneficial use of residual waste, received the most attention, because residual waste constitutes the highest volume of waste materials in Pennsylvania. Waste redux efforts include many elements already implemented, including webpage improvements so that regulated community better understands regulations and waste definitions, and posting on DEP webpages of existing General Beneficial Use Permits, which can be used at other sites, after appropriate procedures are followed and notices are given. In addition, the beneficial use approval process is proposed to be simplified.

The following summarizes the most important elements and output of the Waste Redux project:

DEP WASTE REDUX PROJECT - KEY ELEMENTS

ITEM	STATUS	ACTION
Change/Clarify Definition of Waste	Upcoming	Provide speculative accumulation flexibility and allow in some instances for reuse of material without being considered waste even if reclamation is necessary prior to reuse.
Industry Wide Coproduct proposals	Proposed water treatment plant sludge industry wide coproduct drafted (pending)	May propose RAP, tires as fuel, foundry sand for cement making and slag as road base etc. EMS will be a requirement.
Highlight existing Opportunities to reuse Materials and information sharing	(In Progress)	Published improved summary of waste definition with reg references, listed coproduct determinations, listed maximum limits for categories of general permits.
General permit process improvements	Proposed	Modified application forms, pursuing regional registration after initial general permit. Developing step-by-step procedures and targeting web based wizard driven electronic application. Developing maximum total concentration limits after comparing beneficial use maximum levels with Act 2 and clean fill limits.
General requirements	Proposed	Electronic submission of reports. Require additional annual operation report information (AOR) from permitted facilities. AOR changes to allow for fee collection if applicable.
Misc.	Proposed	Clarify who needs to report such as warehouses, gas stations, universities. Allow use of soil, brick block and concrete from manufacturing operations as clean fill.

The most important element of the effort has been synthesis of numeric limits with the Act 2 Land Recycling Program, and with those used by DEP for sewage sludge application. For about a decade, there have been comments from the regulated community and environmental managers throughout the Commonwealth that numeric limits under the various DEP programs, where materials are used to improve soil, or to place material on land, were inconsistent and illogical. A major effort has been completed to synthesize these limits.

In July, the Waste Redux Report will be issued for public comment. After a generation of "command and control" waste regulations which had the effect of giving Pennsylvania the most stringent waste regulations in the country, but also, the largest volume of residual waste, we at RT applaud Secretary McGinty's efforts to maximize the beneficial use of materials. At the same time, RT has been working with the Pennsylvania Aggregates and Concrete Association, and DEP's Mineral Resources and Waste Management staff to finalize criteria for reclamation of surface mines, which is one of Pennsylvania's most pressing environmental problems, and will be for generations to come. At RT Review Press Time, Secretary McGinty was expected to finalize a "no cost contract" program, which will provide Clean Fill Policy regulatory principles, reclamation requirements from the DEP Mineral Resources program, as well as program elements from Water Management into an environmentally protection approach to reclaim quarries using Clean Fill materials, at no cost to the Commonwealth. RT believes that this will be an excellent approach which can be applied statewide, addressing what is perhaps the most pressing environmental problem. Old surface mines have scarred landscapes and many are a clear imminent threat to health and safety, because there are unsecured high walls which cause the deaths of many Pennsylvanians each year.

DEP is not waiting to implement Waste Redux Program elements. Webpage improvements, and other initiatives, are already being implemented. The program is to be issued for public comment in July, with regulatory changes resulting from the Waste Redux effort, becoming issued by 2007.

RT recommends that all those involved in Pennsylvania's asphalt, mining and construction industry, take careful note of these changes, as there will be more opportunities in future for recycling and reuse of materials, and minimization of the generation of waste. All those involved in PA industry should examine their operations to make sure they will remain competitive in the future, as a number of companies are reaching out to establish new profit centers given the improved regulatory climate for recycling and beneficial use of construction materials, which constitute large volumes of municipal and residual waste.

For more information on the Waste Redux project, or to receive a copy of DEP's Waste Redux Report, call Gary Brown at 800-725-0593, ext.34.

PENNSYLVANIA BULLETIN NOTICES

AVAILABILITY OF FINAL TOTAL MAXIMUM DAILY LOADS (TMDLs):
Statewide listing of new TMDLs in various watersheds. - 3/26/05
PROPOSED RULEMAKING ENVIRONMENTAL HEARING BOARD:
The proposed procedural rules have the following objectives:
(1) To provide the regulated community and the Department of Environmental Protection (Department) and other potential litigants with more specific guidance on how to represent their interests before the EHB.
(2) To improve the rules of practice and procedure before the EHB. - 4/9/05
AVAILABILITY OF FINAL TOTAL MAXIMUM DAILY LOADS (TMDLs):
Statewide listing of new TMDLs; includes PCBs in the Delaware Estuary. - 4/9/05
AVAILABILITY OF TECHNICAL GUIDANCE:
Toxics Management Strategy. - 4/16/05
DRAFT GUIDANCE - SUBSTANTIVE REVISION:
Title: Modification and Maintenance Issues. Description: This guidance document assists individuals in determining the classification of various modifications to storage tank systems and in determining when certified inspectors or installers are required. - 4/30/05
FINAL GUIDANCE - NEW GUIDANCE
Title: Consumer Confidence Report Handbook. Description: This handbook was developed to assist community water suppliers in complying with the consumer confidence reporting requirements. - 4/30/05
FINAL GENERAL PLAN APPROVAL AND/OR GENERAL OPERATING PERMITS (BAQ-GPA/GP-9, GP-11 AND GP-12
The Department of Environmental Protection (Department) has finalized the General Plan Approval and/or General Operating Permits (GPs) for:
BAQ-GPA/GP-9 (Diesel or No. 2 Fuel-fired Internal Combustion Engines)
BAQ-GPA/GP-11 (Nonroad Engines)
BAQ-GPA/GP-12 (Fugitive Dust Sources and Diesel-fired Internal Combustion Engines at Coal and Coal Refuse Mining Sites)
The GPs, applications and the comment/response document are available on the Department's website: www.dep.state.pa.us. (DEP keyword: Air Quality). - 5/7/05
AVAILABILITY OF TECHNICAL GUIDANCE: DRAFT GUIDANCE - NEW GUIDANCE
Title: Citing Inspection Violations. Description: This guidance establishes a uniform methodology across all Department regions for citing violations within municipal, residual and hazardous waste programs. - 5/7/05
AVAILABILITY OF TECHNICAL GUIDANCE: DRAFT GUIDANCE - NEW GUIDANCE
Title: Enforcement Actions. Description: This document provides guidelines for Department staff to implement a uniform methodology across all Department regions for enforcement actions within municipal, residual and hazardous waste programs. - 5/7/05
AVAILABILITY OF TECHNICAL GUIDANCE: DRAFT GUIDANCE - NEW GUIDANCE
Title: Violations Requiring and Extended Time Period to Correct. - 5/7/05
AVAILABILITY OF TECHNICAL GUIDANCE: DRAFT GUIDANCE - NEW GUIDANCE
Title: Program Implementation Guidance. Description: This document provides a formal methodology by which the Bureau of Land Recycling and Waste Management will implement a compliance and enforcement program throughout this Commonwealth. - 5/7/05**AVAILABILITY OF TECHNICAL GUIDANCE: DRAFT GUIDANCE - NEW GUIDANCE**
Title: Notices of Violation (NOVs). Description: This document provides a formal methodology by which the Bureau of Land Recycling and Waste Management will cite similar violations in a similar manner. - 5/7/05
AVAILABILITY OF TECHNICAL GUIDANCE: DRAFT GUIDANCE - NEW GUIDANCE
Title: Performing Hazardous Waste Facility Inspections. This document establishes a formal methodology for conducting hazardous waste facility inspections in a similar fashion across all six regions of the Department. -5/7/05
AVAILABILITY OF TECHNICAL GUIDANCE: DRAFT GUIDANCE - NEW GUIDANCE
Title: Performing Municipal and Residual Waste Facility Inspections. Description: This document provides a formal methodology for conducting municipal and residual waste facility inspections in a similar fashion across all six regions of the Department. - 5/7/05
AVAILABILITY OF TECHNICAL GUIDANCE: DRAFT GUIDANCE - NEW GUIDANCE
Title: Storage Tank Program Internal Policy on Inspections and On-Site Visits. Description: This document establishes uniform procedures for Storage Tank Program inspections. - 5/7/05
AVAILABILITY OF TECHNICAL GUIDANCE: DRAFT GUIDANCE - NEW GUIDANCE
Title: Guidelines for Identifying, Tracking, and Resolving Violations for Storage Tanks. Description: This document establishes guidance for the Storage Tank Program "Corrective Action Process for Owners and Operators of Storage Tanks and Storage Tank Facilities and other Responsible Parties." It includes procedures for release reporting, release confirmation and correction action requirements for owners and operators of storage tank facilities as well as other responsible parties. - 5/7/05
AVAILABILITY OF TECHNICAL GUIDANCE: FINAL GUIDANCE - MINOR REVISION
Title: Guidelines for Agricultural Utilization of Sewage Sludge. Description: This is a minor modification to existing guidance that provides a coordinated and consistent Statewide process for determining compliance with requirements contained in permits issued under 25 Pa. Code Chapter 275 (relating to land application of sewage sludge). The Cumulative Pollutant Loading Rates (CPLR) section has been updated to remove background soil samples as the starting point for the calculations. - 5/7/05
FINAL TECHNICAL GUIDANCE - SUBSTANTIVE REVISION
Agricultural Land Preservation Policy. - 5/21/05
DRAFT TECHNICAL GUIDANCE - NEW GUIDANCE
Safety Requirements for Construction of Shafts for Underground Mines. - 5/21/05
FINAL TECHNICAL GUIDANCE - SUBSTANTIVE REVISION
Explosives Program Compliance and Enforcement Procedures. - 5/28/05
RULES AND REGULATIONS - Handling, Use and Storage of Explosives
This final-rulemaking was adopted by order of the Board at its meeting of January 18, 2005. At the April 19, 2005, Board meeting, the Board approved amendments to the final order addressing the Independent Regulatory Commission's (IRRC) March 10, 2005, disapproval of the Board's January 18, 2005, rulemaking. IRRC's disapproval order was received March 16, 2005. - 6/25/05
AVAILABILITY OF TECHNICAL GUIDANCE: FINAL TECHNICAL GUIDANCE - NEW GUIDANCE
Land Maintenance Financial Guarantees. - 6/25/05
FINAL TECHNICAL GUIDANCE - SUBSTANTIVE REVISION
Compliance Monitoring of Oil and Gas Wells and Related Facilities and Activities. - 6/25/05
FINAL TECHNICAL GUIDANCE - SUBSTANTIVE REVISION
Enforcement Actions by DEP's Oil and Gas Management Program. - 6/25/05
FINAL TECHNICAL GUIDANCE - SUBSTANTIVE REVISION
Pennsylvania's Interim Program for Operator Certification. Water and Wastewater Systems Operators' Certification. - 6/25/05
DRAFT TECHNICAL GUIDANCE - NEW GUIDANCE
Guidelines for Identifying Tracking and Resolving Violations for the Land Application of Biosolids. - 6/25/05
DRAFT TECHNICAL GUIDANCE - NEW GUIDANCE
Act 537 Program Guidance; Local Agency/Municipality Evaluation and Compliance Activity. - 6/25/05
DRAFT TECHNICAL GUIDANCE - NEW GUIDANCE
Program Guidance; Sewage Enforcement. - 6/25/05
DRAFT TECHNICAL GUIDANCE - NEW GUIDANCE
Program Guidance; Identifying, Tracking, Resolving of Sewage Facilities Act Violations. - 6/25/05
DRAFT TECHNICAL GUIDANCE - NEW GUIDANCE
Guidance for Calculating Civil Penalty Assessment Amounts under the Sewage Facilities Act. - 6/25/05
DRAFT TECHNICAL GUIDANCE - NEW GUIDANCE
Act 537 Program Guidance; Civil Penalty Assessment Processing. - 6/25/05
DRAFT TECHNICAL GUIDANCE - NEW GUIDANCE
Guidelines for Identifying, Tracking, and Resolving Violations for Water Quality. - 6/25/05
DRAFT TECHNICAL GUIDANCE - NEW GUIDANCE
Guidelines for Identifying, Tracking and Resolving Violations for the Drinking Water Program. - 6/25/05
DRAFT TECHNICAL GUIDANCE - NEW GUIDANCE
Noncoal Compliance/Enforcement Procedures. - 6/25/05
FINAL TECHNICAL GUIDANCE - NEW GUIDANCE:
Development of a Replacement Source for a Community Water System. - 7/2/05

KEY HIGHLIGHTS

FEDERAL UPDATES
- EPA Revamping VI, Pg. 11
- GAO Brownfields Report, Pg. 12
- No Private Party RCRA Suits, Pg. 12
- Institutional Control Costs, Pg. 13
- Truck/Bus Emissions, Pg. 13
- Diesel Engines, Pg. 14

PA UPDATES
- Federal Mercury Challenge, Pg. 5
- Recycling Record, Pg. 5
- Uniform Covenants, Pg. 5
- Abandoned Mines, Pg. 6
- Waste Redux, Pg. 18

NJ REGULATORY UPDATES
- Lower Delaware River Special Protection, Pg. 15
- Mercury Switch Recycling, Pg. 15
- Boosting Recycling, Pg. 16
- Landfill Space Preservation, Pg. 17

TECHNOLOGY UPDATES
- Mercury & Autism, Pg. 7
- Sea Level Rise, Pg. 7
- Roach Allergens, Pg. 7
- Clouds & Disease, Pg. 8
- Railroads & Fuel Efficiency, Pg. 9

RT E-MAIL DIRECTORY

LARRY BILY	LBILY@RTENV.COM
GARY BROWN	GBROWN@RTENV.COM
ROB CAREY	RCAREY@RTENV.COM
MARK ESCHBACHER	MESCHBACHER@RTENV.COM
CHRIS EYRE	CEYRE@RTENVNJ.COM
KEITH GERBER	KGERBER@RTENV.COM
WALTER HUNGARTER	WHUNGARTER@RTENV.COM
RICH JOHNSON	RJOHNSON@RTENV.COM
JUSTIN LAUTERBACH	JLAUTERBACH@RTENVNJ.COM
KATHY O'CONNOR	KOCONNOR@RTENV.COM
JOE LANG	JLANG@RTENVNJ.COM
RAFAEL TORRES	RTORRES@RTENVNJ.COM

VISIT OUR WEBSITE WWW. RTENV.COM

IN THIS ISSUE

RT Environmental Services, Inc.
215 West Church Road
King of Prussia, Pennsylvania 19406

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U.S.Postage
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