

The RT Review

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

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PENNSYLVANIA CHAMBER OF BUSINESS & INDUSTRY TO SUBMIT COMMENTS ON DRAFT STORMWATER BEST MANAGEMENT PRACTICE MANUAL; IMPACTS ON BROWNFIELDS SITES FEARED

PA DEP has issued a draft Pennsylvania Stormwater Best Management Practice Manual for comments. The PA Chamber of Business and Industry, at *RT Review* Press Time was considering submitting comments to PADEP as follows:

- The Chamber supports the objective of developing a workable, realistic, and understandable set of guidelines and best management practices that can assist landowners, developers, contractors, farmers and others in formulating reasonable and cost-effective stormwater proposals.
- The Chamber however, has serious concerns with:
 - 1- the tone of the manual and how DEP staff, and county and local government staff will use its content; i.e. its level of detail with many subjective terms and concepts;
 - 2- its focus and bias against development focus on land use principles that have not been subject to broad public debate and acceptance by the General Assembly;
 - 3- geologic, geotechnical and public safety issues with some of the recommended practices;
 - 4- a view of the world that appears to be based on the areas in the southeastern Pennsylvania almost to the exclusion of the other geographic regions of the commonwealth; and
 - 5- little or no regard for the costs that ultimately will be passed on to consumers and the fact that insistence on some of the proposed BMP's may further undermine the economic competitiveness of the Commonwealth.

The manual is replete with terms such as: "should consider", "many consider", "highly complex" etc. In fact, the writer of the manual takes pride in saying that the manual provides great flexibility in allowing local governments, county governments and the state the ability to find the best mix of practices and procedures to maximize the control of stormwater. Unfortunately, this approach provides little predictability for the developer, contractor, or engineer on

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NEW JERSEY BEGINS TO REGULATE PERMANENT GREENHOUSES THROUGH BEST MANAGEMENT PRACTICES

New Jersey State Agricultural Board has retained Rutgers University to prepare its first Best Management Practice, which would cover permanent greenhouse operations. RT has obtained a draft copy of the practice, and there are a number of concerns. Although laudable in intent, because of current and historic confusion over how wetlands and stream encroachment DEP Programs apply to agriculture sites, and, because little guidance has given to municipal engineers on how to integrate proposed practices with local site plan and zoning ordinance approval requirements, it will clearly become harder to construct and operate permanent greenhouse operations in New Jersey.

Equally problematic is that no guidance is given, as to whether improvements involving permanent greenhouse construction, would subject the entire agricultural operation at a site to public review. Although the draft practice guidance document indicates that some provisions apply or do not apply to facilities constructed before or after 1998, there is no discussion as to how facilities from that date up until the current time, are or

are not regulated. RT believes that is critical that a final guidance not be issued until important implementation details are spelled out.

Permanent greenhouse growing operations have received much attention in Europe and elsewhere throughout the world, as erosion is minimized, and water use is conserved. Given the substantial reduction in resources, because the growing operations are covered by a roof, use of permanent greenhouses are clearly superior to open growing techniques, which have higher potential for erosion and nutrient losses, as well as more intensive water use, due to evaporation losses.

Until the proposed practice document is better developed, we think that the draft practice should be withheld, as it has the potential to do more harm than good. State of the art growing techniques and permanent greenhouses are important, given New Jersey's and the region's propensity for favoring plenty of "green" in our homes, apartments, and lawn areas.

RT has commented on the proposed practices; should you desire a copy of our comment letter please call Gary Brown at 800-725-0593, ext. 34.

PENNSYLVANIA RESIDUAL WASTE PROGRAM CHANGES UNDER CONSIDERATION

Pennsylvania Department of Environmental Protection is considering changes to the definition of residual waste, which was requested to be examined by DEP Secretary Kathleen McGinty. Initiatives under consideration are being reviewed by the Solid Waste Advisory Committee/Residual Waste Subcommittee, including:

- Simplifying the procedures for obtaining general beneficial use permits.
- Eliminating certain materials, from the "waste stream" where such materials are inert, and are residual waste simply because they are defined as waste because they are air pollution control dust and/or sludges.
- The definition of materials being waste simply because of the 1992 definition of numeric limits for

materials having to be placed in unlined landfills, is being evaluated, to see, if instead, limits might be revised to be in line with either the Clean Fill Policy or Act 2 Land Recycling Program (Act 2 limits were subject to regulation and are peer reviewed).

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MARK ESCHBACHER, P.G. JOINS RT

Mark Eschbacher, P.G. has joined RT, at our King of Prussia Headquarters. Mr. Eschbacher has sixteen years of diverse environmental consulting experience, including management and Professional Geologist oversight of Act 2 Land Recycling projects. Mr. Eschbacher has a Bachelor of Science Degree from the University of Missouri. Projects which Mr. Eschbacher has been involved include work at federal sites, including areas with unexploded ordnance, and on a Philadelphia airport runway project. Mr. Eschbacher also has landfill closure experience on a project in New Jersey, as well.

Mr. Eschbacher is already hard at work on an Act 2 project involving a former chemical plant along the Delaware River in Delaware County, and on a project involving a northeast Pennsylvania surface mine site, which is in close proximity to a Pennsylvania hazardous site cleanup act site. Mr. Eschbacher is already demonstrating a high level of skill in coordinating field work, and, interfacing with clients and regulatory officials on our dozens of Pennsylvania Act 2 and New Jersey Brownfields project in progress. We welcome Mr. Eschbacher to the firm.



ROB CAREY JOINS RT AS REMEDIATION GROUP MANAGER

Rob Carey has joined RT as Manager of our King of Prussia Remediation Group. Mr. Carey has more than fourteen years of experience in environmental consulting, and has demonstrated project experience on large scale remedial projects, including those involving CERCLA, RCRA, and TSCA. He also has experience on sites that were addressed under the Act 2 Land Recycling Program, and the New Jersey Technical Requirements for Site Remediation.

Mr. Carey has a Bachelors of Science Degree from the University of Pittsburgh, and, in addition to consulting firm experience, has served as a manager at remediation firms. As a large number of RT's projects involving property transaction and Brownfields redevelopment have a significant remediation management component, we are pleased to welcome Mr. Carey's in-depth remediation expertise to the firm. Mr. Carey has already taken over project management of a large New Jersey Brownfields redevelopment project, which is expected to continue, for a number of years, as the 386 acre site, with a long industrial history, goes through the redevelopment process.

We welcome him to the firm.

RT STAFF AND PROJECT NEWS

At RT Review Press Time, RT was in the process of staffing up to meet service increases of 10 to 20% projected for 2005. As indicated in a related article, Robert Carey and Mark Eschbacher, P.G., have joined RT's King of Prussia Headquarters as senior staff. Mark is already busy on a surface mining/contaminated site project in Pennsylvania DEP's Northeast region where it needs to be demonstrated that further surface mining activities will not be affected and will not exacerbate contamination from an adjacent HSCA site.

Chris Eyre is now managing RT's New Jersey Office, and, in light of strong performance, Jason Free and Rafael Torres are

being given increased responsibility as result of their strong project performance.

Gary Brown was working with Pennsylvania DEP officials as major changes to the residual waste program were moving to finalization. Gary was appointed to the Solid Waste Advisory Council/Residual Waste Subcommittee by DEP Secretary McGinty. Indications are that changes will restore the credibility of the Waste Program, and make it consistent with any of the initiatives under the Award Winning Act II Land Recycling Program.

Riverfront redevelopment on the Pennsylvania side of the Delaware river

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PENNSYLVANIA CHAMBER OF BUSINESS & INDUSTRY TO SUBMIT COMMENTS ON DRAFT STORMWATER BEST MANAGEMENT PRACTICE MANUAL; IMPACTS ON BROWNFIELDS SITES FEARED *(Continued from page 1)*

what will be acceptable for proposed development, highway, or other project.

The manual clearly has a bias in favor of new land planning processes which may or may not work effectively in the more rural areas of Pennsylvania. The list of BMP's appears to be a back door attempt to further land use principles that are based on a southeastern Pennsylvania view of the world. Pennsylvania is a state of many regions and solutions from one region may not be desirable for another of the regions. This position is confirmed by the fact many of the examples used are only from the southeastern portion of the state.

Many areas of Pennsylvania, including areas through out the ridge and valley regions, have limestone or karst sub-base geologic formations. These areas are prone to sinkhole formation due to stormwater run-off/infiltration and fluctuating ground water tables. As noted in the manual, stormwater infiltration without causing sinkhole formation can be successful. However, there are also numerous examples where this has not been the case. Avoidance of such problems requires very careful engineering, including the mapping of solution channels and sinkhole prone areas. If the onus of performing such studies (which often affect large

areas) is shifted to individual property owners, substantial costs will be added to development.

The manual does not address how revised stormwater management concepts play out in the coal field of Pennsylvania, where often the environmental goal is to reduce acid mine drainage (AMD). In these areas, sheet run-off versus infiltration is the preferred option. Increased infiltration may increase the flow of water into mine voids and mine pools, which will often manifest in blow-outs or increased AMD in the receiving streams. These issues need careful consideration as the regulatory staff are trained on the application of the new principles of the manual.

Another concern is the potential for increased ground water contamination. Unfortunately, not all stormwater is "pure." Stormwater may bear a variety of contaminants, in both dissolved and sediment forms, only some of which can be removed by the soils or substrait as the water is infiltrated into the ground. Unlike surface waters, which have the ability to assimilate many of these pollutants and are much more readily capable of recovering from a temporary influx of pollutants, pollutants that enter groundwater tend to linger for a long period of time and are hard to remove. Over the past several decades, federal

and state regulatory programs have striven to eliminate the engineered "underground injection" of pollutants; yet the draft manual expends little attention to the potential risk of providing a new pathway for such pollutants to enter groundwater.

Nowhere in the manual are there any references to the contribution to stormwater runoff from farming or silviculture. According to EPA, these two practices contribute to the bulk of non-profit source pollution to our waterways. In fact, the Chesapeake Bay Report focuses most of its attention on this area for control and enhanced regulation.

RT, through the PA Environmental Council, has already commented to a legislator that Brownfields site redevelopment will suffer if stormwater issues are not properly handled. Adding substantial stormwater management costs to Brownfields projects frequently makes them uneconomical. Inability of local and county engineers to be flexible has already delayed Brownfields projects in PA; this manual will make redevelopment harder. Lets all hope that many more details on applicability are included before this manual goes any further.

Gary Brown

CALIFORNIA COURT UPHOLDS STRINGENT STORMWATER PERMIT

A three judge panel of the California Court of Appeals has unanimously rejected a legal challenge filed by developers keen to void a San Diego stormwater permit that aims to reduce contaminated runoff from urban sources.

Environmentalists hailed the decision, which covers all of San Diego county and impacts other pending cases that challenge the right of state regulators to require compliance with water quality standards.

"This is the most important water pollution case in California in quite a few years," said David Beckman, a senior attorney at Natural Resources Defense Council and lead counsel for conservation group that intervened in the case.

"This decision says it is results that matter not just effort," said Beckman. "It gives teeth our water quality laws. It says that if water is contaminated, polluters must apply more stringent techniques until the water is actually clean."

The permit, issued in 2001 by San Diego's water pollution agency, calls on developers to take actions, including the installation of new equipment at storm drains, to curb urban runoff. The Building Industry Association challenged the permit, alleging that the requirements set by the state Regional Quality Control Board were too stringent.

The court ruled that developers failed to show that "the permit requirements were

impracticable under federal law or unreasonable under state law."

The Building Industry Association has not yet determined whether it will appeal the decision to the state's Supreme Court.

Urban runoff is the biggest source of pollution in California's coastal water, rivers, streams and lakes.

In recent years, the building industry has challenged water pollution cleanup plans meant to curtail urban runoff, arguing that they may not be used to force builders, businesses and municipalities to meet water quality standards but only to make an effort at cleanup.

"If that were true, it would seriously undermine efforts to control the biggest source water pollution in the state," said Beckman.

(Env. News Service - 12/10/04)

NY MAKES TECHNICAL AMENDMENTS TO BROWNFIELD CLEANUP ACT

The New York state legislature passed bills S. 7726 on August 11 that amends New York's Brownfield Cleanup Act. The bill clarifies several tax credit provisions and imposes a ten year limit on the real property tax credit that is available to developers of brownfield.

Property must be enrolled in the Brownfields Cleanup Program by September 1, 2006 in order to be eligible for the tax benefits of redeveloping in an "environmental zone." The definition of "developer" has been expanded to include a person

who was issued a certification of completion (COC) from the state or any person who has acquired all or a portion of the site from a taxpayer, or any other person issued a COC, as long as the conveyance occurs within seven years of the COC's effective date. Governor Pataki signed the bill into law on October 5, 2004, as Chapter 577 of the Laws of 2004.

(Wolf Block Env. and Land Use - Winter 2004/05)

DE APPROVES BILL TO PROTECT DEVELOPERS FROM BROWNFIELDS LIABILITY

Governor Ruth Ann Minner signed State Bill 328 into law on August 3, 2004, creating a liability exemption for developers and providing grants for brownfields development. Under the new law, brownfields developers who conduct due diligence investigations on properties in anticipation of taking title will be exempt from liability as long as they have state-approved plans in place to address contamination at the site. The law also provides for matching grants to help cover the cost of environmental assessments and remediation of brownfields. The Delaware Economic Development Office will administer the grant program. The Delaware Department of Natural Resources and Environmental Control is required to provide for public notice and comment on brownfield development agreements and for a public meeting, if requested.

(Wolf Block Env. and Land Use - Winter 2004/05)

PA UPDATES

PENNSYLVANIA RESIDUAL WASTE PROGRAM CHANGES UNDER CONSIDERATION (cont. from page 1)

In addition to the above, as there is much confusion on construction materials, DEP will prepare a "Fact Sheet", to be available during the upcoming construction season, providing information on what construction materials, including newly generated construction materials and demolition materials, are and are not considered residual waste.

We at RT thank Secretary McGinty, Deputy Secretary Thomas Fidler, Director Richard Struble and Acting Chief Steve Socash for moving forward with consideration of appropriate revisions to the residual waste program.

Where materials can be kept out of the waste stream, and be beneficially used or recycled in an environmentally sound manner, Pennsylvania clearly comes out ahead as pressure is relieved on landfills, and in many instances, materials can be recycled and reused right at the source. Other materials can be used as part of surface mine reclamation projects (see the related story on Clean Fill Policy updates). Gary Brown is a member of the Residual Waste Subcommittee. We at RT appreciate the opportunity to be a part of this important effort.

NEW PACT AIMS TO CUT NUTRIENT RUNOFF INTO CHESAPEAKE BAY

The U.S. Environmental Protection Agency (EPA) has reached a deal with six states and the District of Columbia to limit discharges of phosphorous and nitrogen from 350 municipal and industrial wastewater treatment plants in the Chesapeake Bay watershed.

The two pollutants cause ecological havoc in the Bay, feeding massive algae blooms that kill fish and Bay grasses, which provide vital habitat for the Bay's famous blue crabs.

Robbing the water of oxygen, these algae blooms can form huge dead zones- last year a dead zone covered 35 percent of the volume of the Chesapeake.

"This is a pivotal step in the cleanup and protection of the Chesapeake Bay. The EPA and the states have committed to making the Bay a healthy environment where plants, fish, and other aquatic life can thrive and coexist with development," Donald Welsh, regional administrator for EPA's mid-Atlantic region, said in January.

States participating in the strategy include Maryland, Virginia, Delaware, Pennsylvania, New York and West Virginia.

According to the EPA the permits limits outlined in the agreement will result in reduction of reduction of about 17.5 million pounds of nitrogen and about one million pounds of phosphorus entering the Chesapeake Bay each year.

Officials said it could take five years before all facilities are operating under the new permits and have not yet settled on the specific cuts the permits will require.

(Env. News Service - 1/6/05)

DEP INSTITUTES "BEST MANAGEMENT PRACTICES" FOR LOW-RISK PROPERTIES

DEP Land Recycling staff say program audits have indicated that many remediators or people who clean up a contaminated site choose to perform cleanups outside the formal Land Recycling Program (Act 2) process. A key reason is that in many cases, remediators perceive that their site

has a straightforward solution under Act 2 which can be completed quickly and effectively without going through a long process of a DEP review. DEP has constructed a process to address these sites.

The objectives of the new procedures include:

- Encouraging increased voluntary participation in the Act 2 process for low-risk sites.

- Expediting project development and the reuse of these sites.

- Reducing a remediator's time and cost for interacting with DEP personnel. These costs and timing issues include the uncertainties associated with DEP concurrence when applying professional judgement with respect to data analysis and report preparation.

- Reducing technical reviews by DEP personnel when state-licensed environmental professionals certify remediation plans at low-risk sites. In all instances, of course, final determination of compliance with Act 2 is reserved to DEP personnel who will then be free to concentrate on complex remediations.

Final reports are to be submitted under cover letter identifying them as being a low-risk site. Low-Risk Sites Program criteria includes:

- The total impacted area of soil contamination above the Statewide Health Standard (SHS) for used aquifers must be less than 10,000 square feet and within the property of the remediator ("Site").

- Sites must attain the SHS for used aquifers or use Site Specific Standard pathway elimination or a combination of standards.

- Groundwater must not be currently impacted above the residential SHS.

- All applicable public notice requirements of Act 2, Chapter 250 (Administration of Land Recycling Program) and Chapter 245 (Administration of the Storage Tank and Spill Prevention Program) must be satisfied.

- Properties must be presently developed, or have a plan for development or reuse. (This criterion encompasses home heating oil tank sites).

- Reports submitted containing information or analysis that constitutes professional geologic or engineering work as defined by the Engineer, Land Surveyor and Geologist Registration Law (63 P.S. §§ 148-158.2) must be sealed by a professional geologist or engineer who is in compliance with the requirements of that statute.

- Persons preparing the final reports in this program must have attended a Land Recycling Program client workshop with the last 2 years.

Because the sites are considered low risk, DEP provides full approval of the reports based on the department's review of the sealed work of a licensed professional engineer or geologist.

(PADEP Article)

STORMWATER MANAGEMENT MANUAL ISSUED FOR COMMENT

In late December, PADEP posted on its webpage the draft Pennsylvania Stormwater Best Management Practices Manual, which is now available for public review and comment. The full manual, which is broken down into 10 chapters, provides suggested guidelines, objectives and site design, non-structural and structural best management practices for managing stormwater runoff. The manual is available at the following link:

<http://www.dep.state.pa.us/dep/subject/advcoun/stormwater/stormwatercomm.htm>

PADEP has created a series of regional focus groups to discuss the draft manual.

PA UPDATES

- Residual Waste Revisions, Pg. 1
- Chesapeake Bay Runoff, Pg. 4
- No Act 2 for Arsenic Ag Sites, Pg. 4
- Haz Waste Revisions, Pg. 4

DEP TO STOP AGRICULTURAL SITES FROM OBTAINING ACT 2 CLEANUP LIABILITY PROTECTION

In an unusual move, PADEP Secretary Kathleen McGinty issued a press release indicating that PADEP "will not accept remediation reports submitted for properties formerly used as agricultural or orchard land and slated for development."

Leading environmental lawyers who have followed Act 2 since its passage believe that this decision was ill-advised. Although there has been criticism that Act 2 was not meant to address such sites, PADEP is the first environmental agency, we at RT have even heard of to throw roadblocks in the way of cleanups, which are clearly needed at many agricultural sites contaminated by historic lead arsenate (herbicide/pesticide) use.

It is surprising that PADEP would, in essence, take the law into its own hands and decide to try to limit sprawl by thwarting needed cleanups. If sites are zoned by local officials as "residential", the sites should qualify for cleanup the same as if there was a tank release.

Private sector lawyers have also commented that if PADEP wishes to issue policy, regulation or guidance to tie cleanup procedures and statutes to zoning classifications or planned land use, it must do so through legal channels, not through a Press Release. PADEP should know this because it has issued detailed Guidance for coordinating its permitting with local land use and zoning.

Each day, hundreds or thousands of agricultural workers toil at sites with arsenic concentrations in soils at high levels. The Commonwealth has no plans or funds to address these sites, so we think that PADEP should have left well enough alone and not interfered with the highly successful Act 2 Program. At RT Review press time, it became clear that DEP will allow such cleanups to proceed, but not under Act 2. Best Management Practices under Erosion and Sediment Control Plans will still allow cleanups to proceed. The question now, is will lenders trust DEP sufficiently to allow projects to go forward in the absence of Act 2's Cleanup Liability Protection. Let's hope DEP revisits this issue!

(Gary Brown - RT Environmental Services - 2/05)

HAZARDOUS WASTE REGULATIONS - SUMMARY OF PROPOSED AMENDMENTS

PADEP is proposing a series of Hazardous Waste Regulation Amendments. Changes would include efforts to:

- delete the outdated coproduct transition scheme
- incorporate source reduction strategy improvements
- update financial assurance requirements for bonding and insurance
- expand the Universal Waste exemptions
- expand the permit-by-rule exemptions
- increase the hazardous waste transportation and licensing fees
- increase the hazardous waste permit application and administration fees to cover program costs
- add annual waste generation fee for large quantity generators of hazardous waste.

PA UPDATES CONTINUED

Look for the PA Bulletin or DEP Update announcement of the proposed changes in the near future.

(PA Chamber of Business and Industry)

PADEP CONSIDERS CLEAN FILL PROGRAM AND SURFACE MINE PROGRAM REVISIONS

At RT Review press time, the Pennsylvania Department of Environmental Protection was considering proposing revisions to its August 2004 Clean Fill Policy. In addition, long awaited answers on how the Clean Fill Policy applies to surface mines was also set to be issued.

The following measures were under consideration for revising the Clean Fill Policy:

For materials containing constituents where the exceedence of clean fill limit is based on an Act 2 residential soil to groundwater limit, if SPLP leaching is used to demonstrate that there is not release of constituents above the using aquifer standard (the same the MCL), then the material would be considered Clean Fill.

Certain material currently considered to be historic fill, but which otherwise meets clean fill limits would no longer automatically be considered as regulated fill. Experience in testing and managing historic fill causes us to advise clients who are considering this potential future option, to be sure they are making a full demonstration (12 samples per 3,000 yards), in meeting this limit, as some pockets of historic fill material typically do not meet this criteria. In most instances, it will be necessary to test and separate materials when this criteria is used. Currently, materials designated as regulated fill can only be moved to another site under a general beneficial use permit, or, under the Act 2 Program. If historic fill were found to meet clean fill limits, this requirement would no longer be necessary.

At this time, the majority of large construction project are going through some level of due diligence and/or testing to meet the requirements of the Clean Fill Policy. To date, no waste program general beneficial use permits have been applied for or issued for regulated fill, principally because those developing or redeveloping sites would rather take advantage of the Act 2 Land Recycling

Program, which offers cleanup liability protection after materials are moved between Brownfields sites.

Another option architects and engineers have used when completing site design work, is to balance cuts and fills such that no materials have to move onsite. Thus, the requirements of the Clean Fill Policy are not triggered. Where impacted soils and/or historic fill are present, the trend which has become quite evident is to manage the impacted material or historic fill onsite under the Act 2 Program and only to move offsite, where needed, materials which meet the requirements of the Clean Fill Policy. RT believes that this trend will continue. As we have advised in the past, due to Pennsylvania's long standing industrial heritage, and the fact that spills did not start to be reported until the 1970's clean fill "screening" testing is recommended at all sites prior to moving excess materials over property lines.

Regarding the use of clean fill at surface mines, the DEP had promised to issue a General Permit for Clean Fill use in surface mines by April 2004 but a number of internal decisions delayed the policy. The following program is now expected to be issued shortly:

Where a surface mine permit is in effect, if not already allowed, this surface mining permit may need to be revised to reflect the use of offsite materials in the Facility's Reclamation Plan. Only materials demonstrated to be "inert" (a stronger term than clean fill), will be permitted to be placed below the water table, and to a point eight feet above it. In this context the "water table" refers to the final condition at the surface mine site when dewatering is no longer practiced. To be considered "inert" the material will have to meet all applicable clean fill requirements, due diligence will have to be performed, and additional SPLP leachability analysis will be required. Material will have to be shown to not leach constituents over the used aquifer standards (the same as MCLs).

For materials to be placed from eight feet above the water table up to the surface, Clean Fill materials may be utilized. (Again, this is only if the surface mine permit allows offsite materials to be used in the facility-specific reclamation plan.)

A "no cost contract" can be entered into with the DEP/Waste Management Program, which contains performance requirements for proper reclamation of the site. In addition, permit requirements will need to be complied with, and DEP/Mineral Resources will have to consent to a Reclamation Plan for the site. The same provisions for completing due diligence testing for incoming material as required at permitted surface mine sites, will also need to be followed.

DEP/Mineral Resources expects to issue a Guidance Document in the near future related to clean fill use at surface mine facilities. "No cost contract" has, historically been used at a number of number of facilities, in the past, and is a good approach to be used to facilitate rehabilitation of abandoned quarry sites.

We will keep you informed in the RT Review as these provisions become final, or, you can visit our web site at www.rtenv.com.

CHANGES CONSIDERED FOR PA ACT 2 BROWNFIELD PROGRAM

The Pennsylvania Department of Environmental Protection ("PADEP") is readying amendments to its successful Act 2 Brownfield Cleanup Program. The proposal, scheduled for Environmental Quality Board consideration in April, may contain several significant provisions. These will likely include broadening deed acknowledgment requirements; strengthening post-remediation care plans to maintain institutional or engineering controls; permitting remediators to apply groundwater data from site characterization to demonstrate attainment of Act 2 standards; and significantly raising report review fees. Other Act 2 issues on PADEP's agenda in 2005 are separate phase liquid cleanups, refinements to the vapor intrusion guidance, and the interface between Act 2 and water quality standards. Parties interested in remediating and/or redeveloping Brownfield properties in Pennsylvania will want to track these topics closely.

(Manko, Gold Katcher, and Fox Client Alert - Forecast 2005)

RT STAFF AND PROJECT NEWS (continued from page 2)

continues to dominate RT's project mix. A presentation on residential redevelopment along the Delaware River near the Commodore Barry Bridge is scheduled to be delivered at this year's Montgomery County Industrial Development Authority/Tri-State Commercial Realtors/RT Seminar in late March at the Plymouth Country Club. Gary Brown and Justin Lauterbach will also be making a presentation on updates to the Act 2 Land Recycling Program and the final Clean Fill Policy at the Pennsylvania Chamber of Business and Industry Environmental Conference in April.

Keith Gerber and Larry Bily, working with Craig Hopkins, conducted fast track environmental due diligence work at a large scale commercial and research facility, in Central New Jersey, which will be redeveloped this year by one of our major clients. Jennifer Kilborn has been providing environmental project administrative assistance to one of our lender clients, due to her growing expertise in environmental project management. Paul Ledebur and Chris Ward were working on a Maryland project involving further evaluation of volatile organics in the soil vapor pathway, to address a potential indoor air pathway at a former industrial site. Solvent releases to soil and groundwater had been remediated, and alternate concentration

groundwater limits are being evaluated at the site as the soil vapor pathway is of primary concern.

Tony Alessandrini and Walter Hungarter are involved in a number of projects where vapor barriers are being designed and/or installed at former service station petroleum release, or at solvent release sites. Tony Alessandrini is providing quality assurance oversight, on one project, which was recently mentioned in a Philadelphia Inquirer article on Brownfields sites now going to residential development.

Gary Brown was interviewed and quoted in a Philadelphia Inquirer article on Residential Redevelopment of Brownfield Sites, which appeared in the Inquirer's Sunday, March 13th Edition. Featured prominently in the article was the Anchor Glass/Royersford Site, where RT has worked closely with Granor Price Homes, and with Cathy Ward of the Cooper Levenson law firm to make sure that environmental issues are addressed under the Act 2 Program, using a phased approach during the redevelopment activities.

As residential redevelopment of Brownfields sites increases in our project mix, leading to many "second generation" Brownfields project opportunities, we at RT pledge to bring our redevelopment expertise to each and every project. As always, we appreciate the opportunity to be of service.

TECHNOLOGY UPDATES

STUDY ESTIMATES 80 PERCENT DECLINE IN ANTARCTIC KRILL

Krill- the heart of the rich Antarctic food chain that nourishes whales, seals and penguins- have declined by more than 80 percent in the last 25 years in key ocean regions, according to a new study that links the loss to warming temperatures.

The new research, published in the journal *Nature*, is the first comprehensive attempt to estimate numbers of the small, shrimp-like creatures that were once so abundant that their swarms colored vast patches of the southern oceans blood red.

Now krill have largely been replaced by salps, which are clear, gelatinous invertebrates that provide so little nutrition to predators that they are considered ecological dead-ends, said Angus Atkinson, a marine biologist with the British Antarctic Survey, who led the study.

Such a steep decline in krill could decimate the region's abundant wildlife, ecologists said. The finding may signal that a shift is under way in one of the world's most productive and pristine ecosystems. "We're just holding our breath to see what the consequences are," said William Fraser, an Antarctic researcher who was not involved in the study.

Antarctic krill are thumb-size crustaceans that feast on drifting phytoplankton and in turn provide food for myriad Antarctic denizens, including the blue whale- the largest animal on the planet. Atkinson and his colleagues pooled data from nine nations that collected krill in Antarctic waters. Because krill are a "boom-and-bust" species that vary dramatically in number from year to year, the group looked for long term patterns.

The international team found krill numbers had decreased by more than 80 percent since 1976 in the southwest Atlantic near the Antarctic peninsula, a highly productive marine area thought to be a krill spawning ground and home to about half the region's adult krill. Because krill live six to seven years, they can still get in one good productive year even if ice is sporadic. Fraser said if good ice years occur too far apart, the krill will not be able to successfully reproduce.

"What you would see then is a literal collapse of the food web," he said. "All the predators would suffer some pretty drastic declines." He pointed to the Adelie penguins, which eat only krill during the summer. Their numbers in the Antarctic Peninsula have declined by 70 percent since 1974. A loss of krill also could restrict the rebounding of whale populations, which are still recovering from extensive hunting that pushed them close to extinction. Some scientists, however, are skeptical of the study's conclusions.

Krill expert Steve Nicol of the Australian Antarctic Division questioned whether the Antarctic krill with a biomass once estimated topping one billion tons, were really down by such enormous numbers. "Could we really have lost 900 million tons of krill without anyone noticing? I don't think so," he said. "You would expect to see most of the predators in decline, and that doesn't appear to be happening." He said the krill could be vastly underestimated

because of the difficulty in tracking the creatures as they migrate and are tossed about through the vast seas.

(By Usha Lee McFarling - Philadelphia Inquirer - 11/14/04)

EPA SCRATCHES THE SURFACE OF TEFLON TOXICITY

The U.S. Environmental Protection Agency's (EPA) draft assessment of perfluorooctanoic acid (PFOA), a chemical used to make Teflon, finds that exposure of the chemical presents "a potential risk of development and other adverse effects."

The draft assessment offered no firm conclusions on the health risk to humans and is based on animal studies.

PFOA, also known as C-8, is a chemical processing aid widely used in the manufacture of a consumer and industrial products.

The chemical is used to make dozens of popular consumer products found in nearly every home, from Teflon or other non-stick coated cookware, Stainmaster and other carpet protectors, clothing, fast food packaging, and various cleaning, textile and paper products.

Studies of PFOA have raised a number of potential toxicity concerns.

In addition, the chemical has been found to accumulate in human blood and it does not appear to break down in the environment.

The EPA's Science Advisory Board will review the draft assessment next month.

(Env. News Service - 1/17/05)

BENZENE MAY POSE RISK EVEN AT LOW LEVEL

Blood changes, including a steep decline in disease-fighting white cells, have been found in workers persistently exposed to low levels of benzene, a common industrial chemical known to pose a leukemia risk at high concentrations.

Researchers reported in the journal *Science* that workers in a Chinese shoe factory exposed to less than one part per million of benzene experienced a significant decline of white cells and found their blood-forming cells were less vigorous than normal. U.S. occupational guidelines limit benzene exposure to one part per million, but the study found changes in the blood from lower exposure.

"We can't say that this is associated with the future risk of disease," said Nathaniel Rothman, one of two senior authors of the study. "But it does raise the question of what else is going on in the bone marrow" as a result of low-level exposure to benzene.

Benzene also appears to have a toxic effect on the progenitor cells that form blood cells, and the effect of benzene can be underestimated if only mature blood cells are studied, said Rothman, a researcher at the National Cancer Institute, one of the National Institutes of Health. Benzene is one of the most frequently used chemicals in American industry.

In 1987, the Occupational Safety and Health Administration set the maximum allowable industrial exposure to inhaled benzene at one part

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per million in eight hours. Rothman said it was too soon to say if that standard should be changed.

In the *Science* study, researchers analyzed blood samples from 240 workers who were routinely exposed to benzene-laced glue in a Chinese shoe factory. They found 109 of the workers who were exposed to less than one part per million of benzene had an average of 15 percent of 18 percent fewer white blood cells than did 140 unexposed workers in a Chinese clothing plant. Gilbert Omenn of the University of Michigan Medical School said in *Science* that the study "should cause a stir in the occupational and environmental health circles."

(By Paul Recer - Philadelphia Inquirer - 12/3/04)

WARMING CLIMATE LINKED TO REEF DESTRUCTION

Twenty percent of the world's coral reefs are so damaged that they are unlikely to recover, while another 50 percent could collapse, warns the 2004 edition of "Status of Coral Reefs of the World." Released as delegates gathered for the annual conference of Parties of the United Nations Convention on Climate Change, the report says global warming is the single greatest threat to corals.

The report is based on the findings of 240 experts from 96 countries that participate in the Global Coral Reef Monitoring Network. As climate change warms the sea and makes it more acid, the scientists predict massive bleaching events, such as the one which damaged or destroyed 16 percent of the world's coral reefs in 1998, will be a regular occurrence within 50 years.

The coral bleaching in 1998 was a one in a 1,000 year event in many regions with no past history of such damage in official government records or in the memories of traditional cultures of the affected coral reef countries. The report warns that massive global bleaching mortality will be a 1/100 year event in the future, but a regular event. The reefs the most at risk of severe future degradation are in East Africa, South, South-East, and East Asia, and throughout the Caribbean, according to "Status of Coral Reefs of the World 2004."

Some governments are taking steps to protect their coral reefs. Australia and the United States have signed an agreement to promote coral reefs resilience through shared science and coastal management. Signed Thursday at the U.S. Coral Reef Task Force meeting in Miami, the agreement allows marine sanctuary scientists from Australia and the Florida Keys to share information about the natural ability of corals to survive and recover from environmental stresses like pollution, hurricanes, disease and bleaching. Coral reefs make up less than two-tenths of one percent of the ocean floor but provide habitat for more

TECHNOLOGY UPDATES (Continued)

than 25 percent of all marine life, the Coral Reef Task Force says.

(Env. News Service - 12/6/04)

TINY PARTICLES IN AIR INFLUENCE CARBON SINKS

Aerosols, tiny particles in the atmosphere, may be changing how much carbon plants and ecosystems absorb from or release to the air, according to a NASA funded study. Carbon dioxide acts as a heat trapping greenhouse gas in the atmosphere.

The research, published in a recent issue of "Geophysical Research Letters," is important for understanding climate change and the factors that influence how much carbon gets transferred from the air into below ground carbon sinks.

Carbon sinks are forests and other ecosystems that absorb carbon, removing it from the atmosphere and offsetting carbon dioxide (CO₂) emissions. The effects of aerosols on overall carbon exchange might be greater than clouds, the scientists found. Cloud cover tended to reflect the sun's radiation back out to space, reducing the overall amount of light to Earth's surface. As a result, less sunlight on plants caused less photosynthesis.

The study, which benefitted from NASA satellite data, focused on six sites around the country. The sites represented a wide variety of landscapes, including forests, crops, and grassland. When aerosol levels were high, the amount of carbon absorbed by an ecosystem increased for forest and croplands, and it decreased for grasslands.

Aerosols did not cut the amount of radiation that reached Earth's surface very much. Instead, aerosols scattered sunlight allowing more radiation to penetrate to the lower layers of leaves. This less concentrated radiation due to aerosols allowed for more leaves to photosynthesize at a higher rate. During photosynthesis, plants absorb carbon from the air. In grasslands the top layers of leaves are not as dense as with crops and forests, causing the ground to heat more. When the ground heats, the soil gives more off carbon dioxide reducing the net effect.

For a copy of the findings, go to: http://www.nasa.gov/vision/earth/environment/aerosol_carbon.html

(Env. News Service - 12/20/04)

GLOBAL WARMING COULD SHUTDOWN ATLANTIC CIRCULATION

If global warming shuts down a crucial circulation pattern in the North Atlantic Ocean, the result could be catastrophic climate change, a University of Illinois researcher told colleagues at the American Geophysical Union meeting in San Francisco in December.

The thermohaline circulation is driven by differences in seawater density, caused by temperature and salinity.

Like an enormous conveyor belt, the circulation pattern moves warm surface water from the southern hemisphere toward the North Pole. Between Greenland and Norway, the water cools, sinks into the deep ocean, and begins flowing back to the south.

"If the thermohaline shutdown is irreversible, we would have to work much harder to get it to restart," said Michael Schlesinger, a professor of atmospheric sciences at the University of Illinois at Urbana-Champaign and a co-author of the report.

"This movement carries a tremendous amount of heat northward, and plays a vital role in maintaining the current climate," Schlesinger said. "While shutting it down due to global warming would not cause an ice age, as was depicted in a recent blockbuster movie, 'The Day After Tomorrow,' eastern North America and western Europe would nevertheless experience a shift in climate."

Schlesinger and his team believe that a shutdown is possible since the system has previously shut down by itself. Schlesinger and his team simulated the potential effects with an uncoupled ocean general circulation model and with it coupled to an atmosphere general circulation model. They found that the thermohaline circulation shut down irreversibly in the uncoupled model simulation, but reversibly in the coupled model simulation.

Because the possibility of an irreversible shutdown cannot be excluded, suitable policy options should continue to be explored, Schlesinger advised. "Doing nothing to abate global warming would be foolhardy if the thermohaline circulation shutdown is irreversible.

(Env. News Service - 12/17/04)

LOOSE FILL VERMICULITE INSULATION REGULATIONS CLARIFIED

In response to a letter requesting clarification regarding whether correct use of "current standard PLM and point count methods satisfy current minimum EPA Regulatory requirements for analysis of vermiculite loose fill requirements," Martin Hestmark, Director of the Technical Enforcement Program, responded in the affirmative.

The response included the caution that EPA is informing the public to consider all vermiculite insulation as asbestos-containing material (ACM). This is because the current method is "not accurate and yields false negatives" in this application. The EPA plans to publish a more accurate analysis method for vermiculite insulation which will supersede the current methods. At that time the old method will be subject to enforcement action.

For more information on vermiculite, visit <http://www.epa.gov/asbestos/verm.html>

(The American Indoor Air Quality Council - 11/12/04)

HEALTH CANADA UPDATES 1995 MOLD DOCUMENT

Health Canada, the government department responsible for helping the people of Canada maintain and improve their health, has updated the 1995 version of their "Fungal Contamination in Public Buildings: Health Effects and Investigation Methods." The new version updates information and intends "to reconcile certain practical aspects of the document with

newer publications from ACGIH, AIHA and other cognizant authorities." The 51-page document is in two parts; the first is a review of the health effects of indoor molds and the second part is a guide for investigating mold contamination in non-industrial workplaces (largely, residences, office buildings and schools). In the first section, four major findings on mold health effects are discussed.

The first of these two parts is that four of eight cross sectional studies investigating the relationship between indoor mold and "respiratory, allergic or irritation symptoms" found "significant association between mold exposure and either physician-diagnosed asthma or asthma-related symptoms (cough, wheezing or breathlessness)." The studies were conducted in various countries including Finland, Australia, Taiwan and Canada.

The second finding in part one involved seven case control studies investigating the relationship between mold and asthma. One of the studies found "significant association between 'mold or dampness' and asthma; a second did not assess dampness but otherwise found the mold association. Three found mold-asthma association but not between asthma and dampness. Two found dampness-asthma association but not mold asthma.

The third finding in part one was that no "cohort studies" have been published on the link between residential mold exposure and asthma, "although one study has found an association between mold exposure at school and childhood asthma."

The fourth finding in part one involved animal exposure to "fungal cells, antigens and constituents." These studies found effects much like those observed in humans (i.e., eosinophilia and increased serum IgE). The document cautions that some of the studies were limited by the methods used and that an independent effect of mold on asthma upper respiratory health has been found in a limited number of studies; therefore, it is a difficult connection to assess. What is known, however, is that "exposure to fungi in occupational environmental causes allergic and toxic diseases." For that reason damp conditions and mold growth must be prevented in buildings and fungal contamination must be remediated.

The second of the document's two parts deals with investigation of fungal contamination in the non-industrial workplace. Here the emphasis is the proactive management is the best way to deal with mold. The prevention of fungal contamination means control of moisture, immediate attention to water leakage and/or incursion and maintenance of HVAC systems.

This section outlines the goals of a mold investigation: "establish the cause, nature and extent of fungal contamination; assess the risk of adverse effects on the health of the building occupants; manage microbial problem(s); and return the building to a satisfactory level of performance." It details the proper steps of a mold investigation, including appropriate sampling and interpretation of results, and concludes with the caution that remediation following the investigation should be conducted according to "standard protocols such as those of the AIHA."

The document is available for download on the Health Canada website at: http://www.hc-sc.gc.ca/hecs-secs/air_quality/pdf/fungal_contamination.pdf.

(The American Indoor Air Quality Council - 10/04)

MOBILE PHONE RADIATION HARMS DNA, NEW STUDY FINDS

Radio waves from mobile phones harm body cells and damage DNA in laboratory conditions, according to a new study majority-funded by the European Union, researchers said in late December. The so-called Reflex study, conducted by 12 research groups in seven European countries, did not prove that mobile phones are a risk to health but concluded that more research is needed to see if effects can also be found outside a lab.

The \$100 billion a year mobile phone industry asserts that there is no conclusive evidence of harmful effects as a result of electromagnetic radiation. About 650 million mobile phones are expected to be sold to consumers this year, and over 1.5 billion people around the world use one.

The research project, which took four years and which was coordinated by the German research group Verum, studied the effect of radiation on human and animal cells in a laboratory. After being exposed to electromagnetic fields that are typical for mobile phones, the cells showed a significant increase in single and double-strand DNA breaks. The damage could not always be repaired by the cell. DNA carries the genetic material of an organism and its different cells.

(American Academy of Anti-Aging Medicine - 12/22/04)

TANKLESS VS. TANK-TYPE STORAGE

The recent increase in popularity of tankless water heaters, alternately known as instantaneous, has given rise to claims of super efficiency and huge savings on utility bills. While no single water heater type is a panacea for every application, each should have its place in the engineer's and contractor's arsenal.

The ongoing, recent fascination with tankless water heaters prompted Bradford White Corp., the provider of the EverHot(r) line of tankless water heaters, to initiate head-to-head comparison testing. The hypothesis was that because of the recent increases in minimum DOE efficiency requirements for tank-type models, the disparity might not be as wide as previously claimed. Inside their state-of-the-art research and development facility in Middleville, MI, four water heaters were efficiency-tested under exactly the same conditions.

The testing showed that tankless water heaters can save more energy when compared to storage water heaters. However, the energy savings are dependent on the system design and water usage. Efficiency differences become greater in single-person households with relatively low water usage due to the higher standby loss of a storage water heater. A higher water usage rate may increase the level of energy (cost) savings

necessary to offset the cost of the tankless water heaters.

The best application for a tankless model is where long continuous hot water draws are required, as long as draws do not exceed the capacity of the water heater (Tankless #2 was rated 4 gpm at 770F rise) and where installation space is limited or an outdoor installation is desired. There is no doubt that tankless water heaters are benefitting from an increase in popularity and are providing fine service in selected applications. The higher Btu inputs and improved design features of today's tankless models are vastly superior to those on the scene decades ago. However, many prevalent field conditions can work against operational efficiencies to reduce output, and thereby reduce customer satisfaction. Despite the specific application requirements, the importance of tankless technology and the installation flexibility it allows cannot be understated. Therefore, Bradford White continues to educate engineers and contractors across the country regarding best applications and the proper installation and maintenance of tank-type and tankless water heaters.

This article was supplied by Bradford White Corp., manufacturer of high-efficiency tank-type and tankless water heaters.

(PM Engineer - 1/05)

MOLD NIXES REAL ESTATE DEALS

More than 75% of builders and real estate lenders have heard of a party backing out of a real estate transaction because of mold problems, according to a new poll conducted by Environmental Assurance Group (EAG). In addition, respondents familiar with mold-related incidents in commercial real estate transactions said it takes an average of \$11 million to remediate.

The survey of 40 high-profile real estate developers and banking executives was undertaken by consulting firm EAG to assess mold's financial impact on the real estate market. As mold and the resulting lawsuits have spread across the country, many builders and lenders are taking precautions to protect themselves from liability because of the mold exclusions written by the insurance industry in the last two years.

"This survey confirms the worst fears of major stakeholders in the real estate business - mold is costing big money," said Charles Perry, principal of EAG and a member of the Mortgage Bankers Association mold task force. "Since insurers fled the scene, liability claims have escalated and the devaluation of loan collateral has accelerated. Now lenders, who hold 80% of the risk on a standard real estate transaction, and developers, who hold the other 20%, are scrambling to mitigate risk from an environmental problem that could surpass asbestos and lead paint in its financial consequences.

In fact, when asked what kind of environmental contamination they feared the most in a real estate project, more than half (24 of 40) of those surveyed cited mold. In contrast, asbestos ranked a distant second (eight of 40), followed by mercury (two of 40), and radon (two of 40). Seven respondents chose "all of the above."

"How has mold risen to the top of the worry list so fast? said Perry. "Because to date we've not been focused on preventing mold; we've only been looking at how to fix the problem. Unfortunately, there is no 'cure' for mold. It has baffled many builders and remediators with its ability to reoccur just weeks after it has been scraped or sprayed away. That contrasts sharply with asbestos, lead paint, and other hazards that are considered 'gone for good' after the contamination has been removed or contained. For the lender, if a borrower defaults and you can't guarantee clean-up on the property, it greatly compromises your ability to get your money's worth out of the investment. If commercial tenants or building managers are spending millions of dollars to remediate a mold infestation, how protected can lenders be if the mold returns in 30 days?"

More than half of the real estate industry executives polled (23 of 40) have been involved in or are aware of a real estate transaction where a mold problem arose while the deal was underway. More (25 of 40) were aware of a mold problem or issue holding up a real estate transaction, and 24 of 40 respondents were aware of mold problems revaluing a real estate transaction.

According to Perry, the conditions required for mold to grow include: the existence of mold spores, moisture in the air, a normal temperature range, and the presence of a food source. Since temperatures, airborne spores, and moisture are facts of life, the only controllable variable is the food source - cellulose or paper, primarily in the form of paper-faced wallboard, paper-faced insulation, roofing and ceiling products, and any other organic building material.

(Building Design & Construction - 12/9/04)

UNHEALTHY LEVELS IN FINE SOOT PLAGUE 20 STATES

More than 96 million Americans - about one-third of the U.S. population - live in areas with unhealthy levels of fine particulate matter, the U.S. Environmental Protection Agency (EPA) said in December. The EPA's list of areas failing to comply with the PM2.5 standard includes 224 counties across 20 states as well as the city of Washington, DC.

Only three of the states - California, Montana and Missouri - lie West of the Mississippi River. Governors of states in non-attainment have three years to submit implementation plans outlining strategies to comply with the standard by 2010. States that fail to comply face the risk of losing federal transportation funds, although this is unlikely to be enforced and areas with severe problems can get five year extensions.

EPA Administrator Michael Leavitt told reporters the focus should be on the 30 states that are meeting the standard, rather than the areas that are not in compliance. "This is an American success story," Leavitt said. "This is not a story about the air getting dirtier." Leavitt, who is set to leave the EPA to take charge of the Department of Health and Human Services, said the nation's air "is cleaner today than at any time in memory."

TECHNOLOGY UPDATES (Continued)

That statement is misleading, say critics, who point to a report issued in October by the EPA's Inspector General that found ground level ozone - or smog - has not declined in most of the nation's seriously polluted areas during the past decade and is even increasing in some areas. But the EPA says fine particulate matter has decreased in recent years.

A report released last week by the federal agency estimates PM2.5 levels have decreased 10 percent since 1999 and are about 30 percent lower than the EPA estimates they were 25 years ago. The standards for PM2.5, which consists of tiny airborne particles about 1/30th the size of a human hair, were established by the Clinton administration in 1997, but legal challenges by industry groups slowed their implementation.

In 2001, the U.S. Supreme Court upheld the standards and in 2002 all remaining legal challenges were cleared, allowing EPA to move forward with regulations and programs to limit these fine particulates. The states with counties in non-compliance are: Alabama, California, Connecticut, Delaware, Georgia, Illinois,

Indiana, Kentucky, Maryland, Michigan, Missouri, Montana, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia and West Virginia.

(By J. R. Pegg, *Env. News Service* - 12/20/04)

BANNED CHEMICAL FOUND IN LAKE MICHIGAN

Concentrations of a flame retardant banned by many European countries have been found in Lake Michigan and are increasing, adding to concerns over previous findings that the chemicals were showing up in supermarket foods and women's breast milk.

In the latest study, sponsored by the National Oceanic and Atmospheric Administration, University of Wisconsin scientists found PBDEs, or polybrominated diphenyl ethers, in sediment hundreds of feet down in Lake Michigan.

Fish and other animals absorb chemicals and pollutants through the environment, storing them in fat that people then eat. Studies in rats and mice suggest high levels can cause liver and thyroid damage, NOAA said.

"They're really showing up all over the world," Bill Sonzogni, a University of Wisconsin professor, said Wednesday. "And the Great Lakes - because of the food chain for bioconcentrating contaminants - has sometimes served as a sentinel for other parts of the world."

The three-year study found PBDEs of up to one part per billion in lake sediment - the equivalent of one drop of water in a 10,000 gallon swimming pool. By dating the sample of PBDEs, Sonzogni and scientist Jon Manchester also found that the concentrations were increasing, and they mirror levels of PBDEs and other flame retardants used since the 1970s.

How the PBDEs and other chemicals get into Lake Michigan is still not entirely clear, but the air appears the most likely way.

Starting in 2008, California will become the first state to ban two forms of the PBDEs because they accumulate in the blood of mothers and nursing babies. The ban was approved last year but delayed to give manufacturers time to find alternatives.

(By John Heilprin - *Courier Post* - 11/25/04)

FEDERAL REGULATORY UPDATES

FEDERAL BEACH BACTERIA STANDARDS SET FOR COASTAL STATES

The BEACH Act of 2000 required coastal states and states bordering the Great Lakes to adopt bacteria standards by April 2004 to protect beach bathers from harmful microorganisms.

For states that have not yet adopted those protective standards, the Act required the U.S. Environmental Protection Agency (EPA) to establish standards. In November, EPA Administrator Mike Leavitt signed a final regulation that imposes those standards.

"We're putting in place improved, health-based standards for pathogens in water to further protect the public, particularly children who are often more vulnerable to bacteria-causing illness in beach water," Leavitt said.

Of the 35 states and territories that have coastal or Great Lakes recreational waters, 14 have adopted water quality standards that are as protective of health as EPA's recommended criteria for all their coastal recreation waters.

Five states have adopted the criteria for some of their coastal recreation waters, 13 states are in the process of fully adopting the criteria, and three have not begun the process.

Although the agency is establishing federal standards through this final rule, any state that adopts its own standards that are as protective as the EPA's and received the agency's approval will be removed from these federal requirements.

For more information about the new criteria and the rule, see:

<http://www.epa.gov/waterscience/beaches/bacteria-rule-final-fs.htm>

(*Env. News Service* - 11/10/04)

NEW EPA RISK PLAN COULD LIMIT DREDGING AT SEDIMENT CLEANUPS

EPA is urging its project managers to conduct more detailed risk analyses of dredging and other methods for cleaning up contaminated sediment, which will likely limit the use of dredging as a cleanup method, agency and industry sources say.

An agency source says the new approach aims

to focus other remedies beyond dredging in cleaning up contaminated sediment sites and to place a greater emphasis on using a mix of remedies.

Industry officials have long maintained that dredging is a less effective, more expensive option than capping contamination with clean sediment or using monitored natural attenuation because dredging can resuspend contaminants in the water column. Natural attenuation involves allowing chemical contaminants in soil or groundwater to be degraded by natural processes, rather than actively removing and treating the contamination.

An industry source claims the new EPA risk process represents a major policy shift and says a more careful analysis of different could affect pending cleanup decisions at sites where sediment is contaminated, such as the Diamond Alkali site in Newark Bay, NJ. However, the new risk provisions appear unlikely to have a significant impact at sites where EPA has already finalized its cleanup plans, such as the Hudson River in New York and the Fox River in Wisconsin, according to the EPA source.

The Defense Department (DOD) is also supporting the proposal, arguing that it could be applied at any of its sites. We "support what they're doing," a department source says, adding that the approach is a "potentially valuable tool." But DOD has yet to fully characterize any of its sites to determine whether contaminated sediment is a problem.

The agency in January released an updated version of its draft Contaminated Sediment Remediation Guidance for Hazardous Waste Sites that, for the first time, calls on project managers to use comparative net risk reduction to determine the best remedies. Under this approach, officials will consider not only how effectively the remedy reduces risk, and the residual risk left behind after a remedy is completed, but the risks introduced by implementing the remedy. "By evaluating these two concepts in tandem, additional information may be gained for remedy selection," the guidance states.

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The guidance stresses that the risk associated with each alternative is site-specific, but provides a number of sample factors in weighing the different options. For example, dredging can result in "containment releases during sediment removal, transport, or disposal" and "continued exposure to contaminants currently in the food chain."

EPA is also asking project managers to estimate how much contaminated sediment is released by resuspension during dredging. The guidance says the analysis will provide another means to compare remedies. "To the extent possible, total dredging losses should be estimated on a site-specific basis and considered in the comparison of alternatives during the feasibility study," the guidance states.

Site managers are now expected to study the site-specific variables and compare their projects to similar dredging projects in order to determine the likely resuspension rates. The variables that EPA suggests project managers consider include the physical properties of the sediment, the water velocity and the degree of turbulence. Or project managers can conduct pilot studies at the site to determine the likely amount of resuspension, the guidance suggests.

(*Superfund Report* - 2/14/05)

EPA PROPOSES REGULATORY OPTIONS FOR MAINTAINING NOx AIR QUALITY STANDARDS

On February 14, EPA proposed three regulatory options to maintain air quality in areas that meet national air quality standards for nitrogen dioxide (NO2). The Clean Air Act's Prevention of Significant Deterioration (PSD) program NOX uses "increments" to limit the amount of air quality deterioration that may occur in any given area

FEDERAL REGULATORY UPDATES (CONTINUED)

of the country. For this purpose, ambient concentrations of NO₂ are measured in micrograms per cubic meter. New and modified industrial facilities must evaluate the impact of their emissions of nitrogen oxides (NO_x) in a clean air area to demonstrate that they will not cause or contribute to a violation of any national ambient air quality standard or degree the air beyond the level allowed by PSD increments for NO_x. To ensure that air quality does not deteriorate in attainment areas, states and tribes issue Clean Air Act permits requiring proposed new and expanded facilities to install state-of-the-art air pollution controls.

The action proposes the three following options:

1. To retain the existing increments NO_x measured as nitrogen dioxide (NO₂) in the ambient air as established October 1988;
2. To allow states that choose to implement an interstate cap and trade programs for sources of NO_x to rely on benefits of that program in place of the existing increments to prevent significant deterioration of NO₂ air quality;
3. To allow states to adopt their own planning strategies and implement these in lieu of the NO₂ increment system they show that PSD for NO_x is satisfied through some combination of state and federal emissions controls that has been or will be adopted.

EPA will accept comment on this proposal for 60 days following publication in the Federal Register. For further information and a pre-publication copy of the proposed rule, visit <http://www.epa.gov/nsr/actions.html>

(Environmental Protection E-News - 2/17/05)

HILL FIX EYED AFTER SUPREME COURT RULING LIMITS VOLUNTARY CLEANUPS

Industry and local government sources say they will push Congress to amend the Superfund law after the Supreme Court ruled that polluters voluntarily remediating Superfund and other contaminated sites must first obtain a judicial settlement or court order before suing other responsible parties to recover cleanup costs.

The industry and local government sources say the high court's decision in Cooper Industries v. Aviall Services may torpedo EPA's and states' successful voluntary cleanup efforts, because it will force companies and localities to go through expensive and time-consuming litigation to win a cleanup or other legal order so they can retain the right to sue other polluters. This will add unnecessary legal burdens to EPA, state and local government efforts to ensure that the majority of contaminated sites are cleaned up voluntarily.

The landmark decision will likely also invalidate a host of pending industry lawsuits against the Defense Department (DOD) to address World War II-era contamination, in which chemical and automobile manufacturers such as Dupont and the Ford Motor Co. have sued DOD to recover cleanup costs for sites they constructed and/or operated during World War II to develop weapons and other military equipment.

EPA is already considering how to address the ruling, and whether it has the resources to issue or sue for orders so voluntary cleanups can proceed. "We have to discuss whether it has the resources to issue or sue for orders settlements, most likely administrative orders on consent (AOC)" from polluters seeking to remediate sites, according to an enforcement office source. "Management will be focusing on [the decision] in a more structured fashion soon."

The Supreme Court ruled 7-2 on Dec. 13 to

invalidate a long-standing EPA and state practice of allowing polluters to voluntarily clean up contaminated sites without the government taking action to force them to do so. Those parties could then sue other polluters responsible for contamination at the site to recover cleanup costs.

At issue was Aviall Services's attempt to sue Cooper Industries for cleanup cost Aviall incurred after voluntarily remediating a site it bought from Cooper, which both Cooper and Aviall had contaminated. Cooper Industries challenged Aviall's lawsuit, claiming the plain language of the Superfund statute did not allow a cost contribution suit without a cleanup order. While a three-judge panel of the U.S. Court of Appeals for the 5th Circuit agreed, an en banc panel ruled that Aviall's suite could proceed. Cooper later appealed to the Supreme Court, with then-Solicitor General Ted Olson supporting Cooper's argument, reportedly over the objections of EPA and the Department of Justice's environment division.

The majority decision, authored by Justice Clarence Thomas, says the plain language of the Superfund statute forbids this practice, which will now force polluters to obtain some sort of legal order or settlement before pursuing cleanup at contaminated sites, which, according to one industry source, covered roughly 90 percent of all cleanups, including at many brownfields sites.

The sources says industry and states must now turn to Congress to see whether they can win a narrow fix to Superfund so the voluntary cleanups can continue.

(Superfund Report - 12/20/04)

EPA TO AMEND INDOOR AIR GUIDE TO CONSIDER BACKGROUND LEVELS

EPA will likely amend its draft indoor air contamination guidance to include more specific data to determine pre-existing background pollution levels in assessing liability, an agency source says.

Several states, including Colorado and Massachusetts, have added language to their guidance documents providing methods for separating new contamination from naturally-occurring contaminants and wastes already located on site. Indoor air contamination, also known as vapor intrusion, occurs when contaminants seep into the air from contaminated land and groundwater under buildings.

EPA is taking note of the state efforts and plans to expand provisions in its document, Guidance for Evaluating Vapor Intrusion to the Indoor Air Pathway From Groundwater and Soils, an agency source says. EPA's draft guidance was completed in November 2002, with the final guidance expected sometime in 2005.

Specifically, EPA is planning to add further data on how to assess background levels to Tier 3 of its vapor intrusion screening process. Under Tier 3 regulators answer a series of questions about the site, including whether, "background sources of vapor in indoor air and ambient (outdoor) air [have] been adequately accounted for?" While the guidance recognizes the importance of considering background levels, it does not provide specific tools for assessing this information, state and federal sources say.

Providing specific lines of evidence will "help guide people" in making decisions about how to remediate a site and who is responsible, a Colorado state source says. The EPA source agrees that there is gap in the federal guidance because the agency does not provide information on how to interpret data. The final guidance will be "more prescriptive," the source says.

Colorado's Department of Public Health and Environmental includes a section in its November 8 guidance that provides regulators with 13 lines of evidence to assess pre-existing contamination and methods for determining indoor air concentrations. Filling in this gap in the federal policy is "exactly what our intention was," the state source adds.

This information includes: the constituents of concern (COC) that are present; the distance from the dwelling to the subsurface source of contamination; the amount of waste present; the physical properties of the COCs; measurements taken from underneath the building; and the ratio of the COCs between the groundwater, soil gas, and the indoor air.

"The premise is that if it can be demonstrated through multiple lines of evidence that an indoor air constituent concentration above a rededication goal is not derived from a subsurface source, the party performing the cleanup is not responsible for this background contamination," the guidance states. "The more evidence gathered to support such a conclusion, the stronger the justification for the Department to approve a request to limit a party's responsibility," the document adds.

Background levels of indoor vapors may result from either naturally occurring components, such as radon or methane, or man-made chemicals that do not originate from the hazardous waste site. The guidance states there are two methods for determining background levels, comparing indoor air at the building in question to the ambient conditions around the structure and comparing indoor air at that building with conditions inside of other buildings nearby.

(Superfund Report - 12/6/04)

EPA STAFF SUGGEST INDEPENDENT REVIEW OF ARSENIC RISK VALUE

An EPA task force re-evaluating arsenic's cancer-causing potential will recommend that an outside scientific panel evaluate whether new studies revealing less arsenic toxicity warrant weakening the agency's risk assessment for the metal, EPA and industry sources say.

The interagency task force, which includes EPA staff from the Office of Water (OW), Office of Pesticide Programs (OPP), the Office of Research & Development and the Office of Solid Waste & Emergency Response, plans to brief the assistant administrators of their program offices in the coming weeks on the need for outside review because of new studies that show arsenic is less toxic to animals than competing studies on its toxicity to humans, one agency source says.

The task force will recommend independent review by either the Scientific Advisory Panel, which reviews pesticide studies, or the Science Advisory Board, which evaluates broader agency scientific issues, the source says. The staffers will ask the panel how EPA should quantify arsenic's cancer risk, and whether separate risk assessments are needed for organic and inorganic forms of the metal.

Organic arsenic is found in numerous pesticides, and recent studies have shown it may not be as harmful to humans as the inorganic form of the toxin, which is naturally occurring in drinking water supplies. While the differing effects of organic versus inorganic arsenic on cancer risk in humans is not entirely clear, some EPA scientists say inorganic arsenic is more harmful because of the process by which it metabolizes in the human body.

The new evaluation could have major

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implications for drinking water treatment and waste rededication because the agency and state regulators use EPA's risk value to set drinking water standards and cleanup levels at hazardous waste sites.

The possible peer review is drawing praise from some pesticide industry sources and other scientists, who have argued for the past several years that EPA's arsenic risk value, as reflected in the Integrated Risk Information System (IRIS), is too strict. They claim the studies the agency relied on in crafting the standard assume a linear relationship between arsenic exposure and cancer risk, in which increased exposure to arsenic results in a higher incidence of cancer.

But both the pesticide industry and scientists researching arsenic have submitted studies in the past year that indicate a non-linear, so-called "threshold" relationship between arsenic exposure and cancer risk, such that decreasing arsenic exposure below a certain level does not result in decreased cancer incidence.

OPP has been citing rat studies submitted to the agency by pesticide manufacturers as part of the pesticide re-registration process to claim that a weaker arsenic value may be justified. The agency has collected a number of studies addressing arsenic risk as part of this process because several herbicides contain an organic form of arsenic.

The agency is facing a deadline to re-register the pesticides by 2006, and is now trying to determine to what degree it should consider the new studies in the re-registration decision. The chemicals include two herbicides, DMA and cacadylic acid, and a wood preservation known as CCA.

OPP generally favors two separate risk values to allow broader use of those organic arsenic-based products while still allowing the water office to back a more stringent limit for inorganic arsenic. However, OW has maintained that a strict arsenic risk value, which translates to a drinking water standard of 10 parts per billion (ppb), is warranted. The office cites a 2001 National Academy of Sciences (NAS) review of that value showing a linear relationship between arsenic exposure and cancer risk.

The NAS review focused on studies submitted to the agency since the Bush administration followed a congressional directive to finalize the new drinking water standard for the substance in 2001. EPA tightened the drinking water standard from 50 ppb to 10 ppb based on studies in Taiwan, Argentina and Chile that showed a significant risk of developing cancer at higher exposure levels.

(Superfund Report - 1/17/05)

EPA PROPOSES TO SIMPLIFY THE FORM R

Simplified reporting requirements have been proposed to nearly 23,000 facilities nationwide required to submit annual reports for the EPA Toxics Release Inventory. According to EPA, the proposed changes will reduce the time and resources needed to comply with the TRI reporting requirements.

If the new rules are enacted, facilities would no longer be required to report certain location information, such as latitude and longitude. Several minor reporting changes related to waste management activities are also included in the proposal.

EPA noted that the proposed changes would not affect human health or environmental quality. The public would continue to have access to detailed information about chemical releases and waste management in their community. The agency set a March 11 deadline for submitting comments.

(Env. Tip of the Week - 1/21/05)

EPA, STATES MOVING TO FILL POLICY VOID FOR ASBESTOS IN SOIL CLEANUPS

EPA and state regulatory agencies are responding to a void in asbestos cleanup standards and current risk analyses by developing guidance and regulations for addressing asbestos in soil, regulators say.

As part of those efforts, EPA is finalizing new guidance on asbestos risk assessment, field sampling and analytical methods, and at least two states are developing regulations on how to address the discovery of asbestos containing materials during the redevelopment of former industrial property.

State sources say the problem of asbestos in soil originating from demolished buildings - as opposed to naturally occurring forms of the substance - has become more apparent over the past several years as former industrial sites, known as brownfields, and former military bases have been redeveloped.

"If you look for [asbestos in soil], you will find it," one state source says. The problem, says another state source, is that regulators, until recently, were not looking for it because asbestos is not a groundwater contaminant, a metal nor a volatile organic compound like most Superfund pollutants. "It was an oversight," the source says, especially at former military sites because regulators were unaware that it was common practice for the military through the 1960s to bulldoze old buildings into the ground without removing hazardous substances like asbestos-containing materials.

The discovery of asbestos in soil at several former military bases in Colorado and at some high-profile redevelopment and construction projects in Massachusetts has prompted state regulatory agencies to develop new guidance and regulations, state sources say.

Most asbestos-in-soil cleanups have addressed risk based on a 1973 EPA air standard for asbestos, which set a 1 percent threshold for asbestos-containing materials. But in August, EPA Superfund chief Michael Cook told EPA regions in a memorandum that the 1 percent threshold may not be protective of human health in all instances, a position some state regulators have already adopted.

"The wide use of the one percent threshold in regulations may have caused site managers to assume that levels below the threshold did not pose an unreasonable risk to human health," the Aug. 10 memorandum says. "However, it is important to note that the one percent threshold concept was related to the limit of detection for the analytical methods available at the time and also to EPA's prioritization of resources on materials containing higher percentages of asbestos."

Recent data from several sites provide evidence that soil or debris "containing significantly less than one percent asbestos can release unacceptable air concentrations of all types of asbestos fibers," the memo says.

EPA says the 1 percent threshold is not risk-based, and an accurate exposure value can only be determined through site sampling techniques that generate fibers from soil and bulk samples. To assist the regions, EPA has formed three technical working groups to develop guidance and policy relating to risk assessment, field sampling and analytical methods, Cook says.

In the interim, EPA has collected numerous site reports that discuss specific concerns and issues from current asbestos site actions and posted them on an agency intranet site, along with examples of approved site sampling plans and a list of asbestos

analytical laboratories that have passed an EPA audit.

One of the major challenges in addressing asbestos in soil is that it often remains in discrete clumps and is not homogenous like more traditional contaminants, a state source says. "It's kind of hit or miss" as to whether a sampling plan will find all the asbestos at a site, the source says.

As more regulators become aware of the sampling challenge, they may move toward a risk management approach, where future land use plans dictate how much soil is removed, the source says. The cost of sampling and analyzing the suspected contaminated soil may be equal to or greater than just removing several inches of soil, the source says.

(Inside EPA's Outlook 2005 - January)

EPA UPDATES INFORMATION ON SEDIMENTS

EPA is releasing an updated Report to Congress on National Sediment Quality that assesses and describes the quality of aquatic sediments in rivers, lakes, oceans and estuary bottoms in the United States from 1980 to 1999. This report is an update to the 1997 National Sediment Quality Survey that also assesses changes in sediment contamination over time where data is available. EPA evaluated sediment contaminant data from previously published documents at 19,398 sampling stations and found either a decrease or no change in sediment contamination on a regional level.

This report is intended only to be an inventory of sediment sampling since the samples were not taken uniformly, were compiled by different groups and do not cover the entire country. The data in the report cannot be used to determine trends in areas of the country where data is absent. To help manage localized problems of contaminated sediment, EPA is working through and with environmental laws, other federal agencies, and state and local authorities reduce the sources, abate contamination problems, manage dredged sediments and develop scientifically sound management tools. General information about sediments and the report "The Incidence and Severity of Sediment Contamination in Surface Waters of the United State: National Sediment Quality Survey, Second Edition" are available at: <http://www.epa.gov/waterscience/cs>.

(Environmental Protection E-News - 12/9/04)

EPA PROPOSES NEW WASTE INCINERATOR REGULATIONS

EPA is proposing new rules to reduce emissions of air pollutants from the last remaining category of waste incinerators requiring Clean Air Act regulation. This final category is called "other solid waste incinerators" (OSWI). OSWI consist of institutional waste incinerators and very small municipal waste combustors. Institutional waste incinerators can be located in schools, churches, and local, state or federal buildings that burn waste generated on site. Very small municipal waste combustors burn less than 35 tons per day of municipal solid waste.

EPA has already issued regulations to control emissions from large municipal waste combustors (greater than 250 tons per day capacity); small municipal waste combustors (250 - 35 tons per day capacity); medical waste incinerators; and commercial and industrial solid waste incinerators.

The new proposed rules will provide important improvements in protecting human health and the

FEDERAL REGULATORY UPDATES (CONTINUED)

environment by reducing pollutant emissions of almost 2,800 tons per year when fully implemented, according to EPA.

For a prepublication copy of the proposed rules and a fact sheet, go to:

<http://www.epa.gov/airlinks1.html>. EPA will finalize the OSWI regulations by Nov. 30, 2005.

(*Environmental Protection E-News - 12/2/04*)

NEW EPA DOCUMENTS

Cleaning Up the Nation's Waste Site: Market and Technology Trends - 2004 Edition (EPA 542-R-04-015). The report covers the Nation's seven major cleanup markets, namely Superfund, RCRA Corrective Action, DoD, DOE, USTs, Civilian Federal Agencies, and State Voluntary cleanup programs.

View or download at:

<http://clu-in.org/techpubs.htm>.

Demonstration of Two Long-Term Groundwater Monitoring Optimization Approaches (EPA 542-R04-001a). The report discusses the results of application of two different long-term groundwater monitoring optimization (LTMO) methods including: The Monitoring and Rededication Optimization System (MAROS) software tool; and The Three-Tiered Monitoring Network Optimization (MNO) approach. View or download at <http://clu-in.org/techpubs.htm>.

DNAPL Remediation: Selected Projects Approaching Regulatory Closure (EPA 542-R-04-016). It is a status update on the use of DNAPL source reduction remedial technologies, and provides information about recent projects where regulatory closure has been reached or projects that are approaching regulatory closure, following source reduction. View or download at <http://clu-in.org/techpubs.htm>.

Frequency and Extent of Dispenser Releases at Underground Storage Tank Facilities in South Carolina. (EPA-510-R-04). EPA gathered and analyzed dispenser sampling data from South Carolina's Department of Health and Environmental Control's UST assessment and closure files to determine the frequency and extent of releases from dispensers, and whether the data showed any patterns of dispenser releases. View or download at:

<http://www.epa.gov/swrust1pubs/dispenser.pdf>.

(*Tech Direct - 12/04*)

MORE TAX RELIEF FOR PURCHASERS, OWNERS, AND DEVELOPERS OF BROWNFIELD PROPERTIES

On October 22, 2004, President Bush signed into law the "American Jobs Creation Act of 2004" (the "Jobs Act") that will provide sweeping changes to the Internal Revenue Code of 1986 (the "Tax Code"). Originally intended to remedy effects of the Foreign Sales Corporation/Extraterritorial Income regime of tariffs on American manufacturers and farmers, which the World Trade Organization ruled to be illegal, the Jobs Act contains approximately \$130 billion of tax changes for business and individuals. Nestled within the Jobs Act are a number of "Miscellaneous Provisions." Two provisions provide tax relief of some individuals or entities who are involved with the purchase, ownership, or development of brownfield properties.

Exclusions to Unrelated Business Income and Debt-Financed Property Rules:

The Jobs Act provides eligible taxpayers with an exclusion from unrelated business taxable income for a gain or loss derived from the sale, exchange, or other disposition of a qualifying

brownfield property. The exclusion is available to exempt organizations that acquire, remediate, and transfer qualifying brownfield properties. In addition, the Jobs Act also creates an exclusion from the debt-financed property rules for taxpayers who sell, exchange or otherwise dispose of certain brownfield properties.

To qualify for the exclusions from unrelated business income and the debt-financed property rules, eligible taxpayers must:

- (a) acquire a qualifying brownfield property from an unrelated person;
- (b) pay or incur a minimum level of eligible remediation expenditures with respect to the property; and
- (c) transfer the remediated site to an unrelated person.

Qualifying Brownfield Properties:

The tax exclusion benefits of Section 702 apply only to qualified brownfield properties. A qualified brownfield property is defined as real property that has been certified as a brownfield site within the meaning of CERCLA by an appropriate State agency within the State in which the property is located. A request for certification must include the taxpayer's sworn statement and supporting documentation that demonstrates the presence of a hazardous substance or pollutant which, in light of anticipated future use, complicates the expansion, redevelopment, or reuse of the property.

Eligible Taxpayers:

Eligible taxpayers are organizations that are exempt from tax under Section 501(a) of the Tax Code who: (i) acquired a qualifying brownfield property from unrelated person; and, (ii) incurred remediation expenditures in an amount that exceeds the greater of \$550,000 or twelve percent (12%) of the fair market value of the property (determined as if the property were not contaminated) at the time the property was acquired.

An eligible taxpayer must not be potentially liable - either directly, or indirectly - for the contamination under CERCLA.

Qualified Sale, Exchange, or Other Disposition

In order to qualify as a sale, exchange, or other disposition of a brownfield property the entitles a taxpayer to tax relief under the Jobs Act, the transfer of property must be between an eligible taxpayer and an unrelated person, and, within on year the transfer, the taxpayer must receive a "remediation certification" from the U.S. EPA or appropriate State agency within the State where the property is located. The "remediation certification" must state that, as a result of the taxpayer's action, the property will not be treated as a qualifying brownfield property in the hands of the transferee.

Remediation Certification:

The Jobs Act contains a number of provisions relating to certification of completion of the remediation.

Eligible Remediation Expenditures:

Eligible remediation expenditures include expenditures paid or incurred by the taxpayer to an unrelated person to:

- (1) obtain Phase I & II environmental site assessments of the property;
- (2) obtain goods and services necessary to obtain the remediation certification;
- (3) obtain environmental insurance or financial guarantees necessary to manage the remediation and monitoring of the property;
- (4) remove, control, contain, abate, or otherwise

remediate hazardous substances and pollutants on the property; and,

(5) obtain regulatory certifications and approvals necessary to manage the remediation of the property.

Eligible remediation expenditures do not include:

- (1) any portion of the purchase price paid to acquire the qualifying brownfield property;
- (2) environmental insurance costs paid to obtain legal defense coverage, owner/operator liability coverage, lender liability coverage, or professional liability coverage;
- (3) any amount incurred to the extent such amount is reimbursed, funded or subsidized by other Federal, State, or local programs; or
- (4) any expenditure incurred before the enactment of the Jobs Act.

Debt-Financed Property:

A gain or loss from the transfer of a qualifying brownfield property that otherwise satisfies the requirements of Section 702 is not taxed as unrelated business taxable income merely because the taxpayer incurred debt to acquire or improve the site.

Effective Dates:

Section 702 of the Jobs Act applies to gain or loss on the transfer of property acquired during the period of January 1, 2005 to December 31, 2009. Property acquired during the acquisition period need not be transferred before the termination date in order to qualify for the tax exclusions.

(*Staying Ahead/Saul Ewing - 10/04*)

U.S. EPA RECLASSIFIES SIX CHEMICALS AS LESS TOXIC

One chemical has been removed from the federal list of air toxics, and five others have been reclassified as less harmful than previously thought, the U.S. Environmental Protection Agency (EPA) announced in November.

The solvent ethylene glycol mono-butyl ether (EGBE) has been removed from the list of hazardous air pollutants, but it remains regulated as a volatile organic compound (VOC) and will continue to be reported in the Toxics Release Inventory.

The chemical t-butyl acetate (TBAC) and four others have been exempted from control as volatile organic compounds (VOCs). The EPA also is excluding four chemicals - HFE-7000, HFE-7500, HFC227ea, and methyl formate - from control as volatile organic compounds.

Used as refrigerants, fire suppressants, and propellants, and agency said these chemicals "contribute little or nothing to ground level ozone formation."

These four compounds are preferable substitutes for CFCs and HCFCs, which contribute to the destruction of Earth's stratospheric ozone layer. This protective layer which keeps out harmful ultra-violet rays from the Sun, exists above the ground level atmospheric level that can be contaminated with smog.

In a separate action, EPA is taking the pesticide phosmet off the Extremely Hazardous Substance list under the Emergency Planning and Community Right to Know Act (EPCRA). That means that state emergency response commissions and local emergency planning committee will no longer have to include phosmet in their emergency plans.

(*Env. News Service 11/19/04*)

FEDERAL REGULATORY UPDATES (CONTINUED)

COLORADO DISPUTE MAY SET PRECEDENT FOR REACH OF STATE LAND USE LAWS

Colorado officials are challenging the Energy's Department (DOE) efforts to finalize cleanup at a Superfund site because of DOE's refusal to abide by the state's land use control law, which could set a precedent for whether such state laws apply to federal facilities, according to sources following the issue.

At issue is the pending closure of the former Rocky Flats Nuclear Weapons Plant in Colorado. DOE is due to complete remediation at the site next year, and is working on a post-closure agreement with the state. But the department is refusing to comply with the state's land use control law, state sources say.

The state's Environmental Covenants Act, passed in 2001, requires that responsible parties at a contaminated site ensure that land use controls - specifically the institutional controls (ICs) - that will be applied and maintained at the site.

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

But the department is arguing that the federal government is not subject to state law. According to one state source, DOE maintains that the Resource Conservation & Recovery Act's (RCRA) sovereign immunity waiver for actions concerning the handling of solid and hazardous waste does not apply to the state law. And the department argues that section 120(h) of Superfund, which imposes requirements for transfer of federal property, preempts state institutional control laws as well.

But the Colorado source rejects these arguments, calling them "inane." According to the source, the plain meaning of the RCRA provision would apply to ICs because they are, by definition, efforts to manage and control hazardous and other wastes. The source adds that section 114(a) of Superfund expressly states that the law does not preempt state authority.

The state will likely have to challenge DOE's decision in court if the department does not change its stance before cleanup is complete, the source says. The law is important because it is "the only legal means to ensure that restrictions" at these sites continue to apply the source adds.

(Defense Environment Alert- 11/30/04)

TOXIC SOAP ADDITIVE WIDESPREAD IN U.S. WATERWAYS

Many rivers and streams in the United States are believed to contain a toxic antimicrobial chemical widely used for decades in hand soaps and other cleaning products, but rarely monitored for or detected in the environment.

The study results suggest that the antimicrobial contaminant triclocarban is present in 60 percent of the U.S. water resources investigated, thereby making it the fifth most frequent contaminant among 96 pharmaceuticals, personal care products and organic wastewater contaminants evaluated.

According to the analysis conducted by researchers at the Johns Hopkins Bloomberg School of Public Health, the chemical, triclocarban, has been "greatly underreported."

"We've been using triclocarban for almost half a century at rates approaching one million pounds per year, but we have essentially no idea of what

exactly happens to the compound after we flush it down the drain," said the study's lead author, Dr. Rolf Halden, assistant professor in the School's Department of Environmental Health Sciences and founding member of its Center of Water and Health.

The study was published in an online edition of "Environmental Science & Technology," a peer-reviewed journal of the American Chemical Society.

(Env. News Service - 1/21/05)

SMOKERS MOST AT RISK FROM RADON GAS IN EUROPEAN HOMES

Exposure to radon in homes leads to an increased risk of lung cancer, in particular among smokers, according to a new study of risk from exposure to radon gas in European homes. The first study to examine radon risk to smokers separately from risk to nonsmokers, it found that for any given level of radon, smokers have about 25 times the risk of developing lung cancer as nonsmokers.

Radon can also cause lung cancer in non-smokers but the risk is low. Recent ex-smokers were also found to be at higher risk from radon than non-smokers.

The results show that radon in homes is responsible for about 20,000 lung cancer deaths in the European Union each year. This is about nine percent of total lung cancer deaths in the EU and about two percent of cancer deaths overall.

The risk increases in proportion to the concentration of radon gas in the home and is apparent at concentrations below current remedial action levels used in most European countries.

The study, co-funded by the European Commission, combines information and analysis from 13 smaller case-control studies across Europe covering 7,148 cases of lung cancer and 14,208 controls. The cases studied come from nine European countries.

(Env. News Services - 1/3/05)

STEVE JOHNSON NOMINATED AS EPA ADMINISTRATOR

George Bush has nominated Stephen Johnson to be the Administrator of the Environmental Protection Agency. He has 24 years of experience at the EPA, spanning all four decades of the agency's history. Since late January, he has served as Acting Administrator.

If confirmed by the Senate, Steve will also become the first professional scientist to lead the EPA.

(Env. Tip of the Week - 3/4/05)

NEW HAZARDOUS WASTE MANIFEST

EPA will be releasing its new hazardous waste manifest in the Federal Register very soon. The agency says that it is improving and modernizing the hazardous waste tracking system by standardizing the Uniform Hazardous Waste Manifest form. By standardizing the form, states will no longer be allowed to create state-specific versions of the manifest. This will streamline the waste handling process, help interstate commerce, and reduce regulatory paperwork. EPA estimates the annual national burden reduction to be between \$14 and \$20 Million.

The new manifest will clarify processing procedures for rejected waste shipments and shipment container residues and will use check boxes and adds fields to better track "difficult" shipments, such as container residues, rejected wastes, and transboundary shipments.

The standard manifest will be printed according to a precise specification to assure uniformity. Each form will carry a unique preprinted manifest tracking number. This change allows waste handlers with multi-state operations to register and use their own manifest forms everywhere they do business. EPA still has oversight of the registration process. Recordkeeping, reporting requirements, and other changes streamline and vastly improve hazardous waste tracking. The same manifest form will be used by every jurisdiction beginning in 18 months.

In May 2001, the Agency also proposed to make the manifest tracking form electronic. The Agency is working to resolve significant technological issues that arose during the comment period. Consequently, the e-manifest will be addressed in a future rule. The e-manifest remains a high priority for the Agency because it accounts for much of the annual burden reduction cost savings estimated for the original proposed rule (67 to 79 percent), and waste generators and transporters in 40 CFR Parts 262-263 are affected by this proposal. Related requirements for owners and operators of treatment, storage, and disposal facilities in Parts 264-265 are also affected, along with state requirements in Part 271.

(Env. Tip of the Week - 2/11/05)

NEW EPA DOCUMENTS AND DATABASES

Evaluation of Phytoremediation for Management of Chlorinated Solvents in Soil and Groundwater (EPA 542-R-05-001). View and download at <http://www.cluin.org/techpubs.htm> or <http://www.rtdf.org>.

Remediation Technology Demonstration Project Profiles. See: <http://clu-in.org/products/demos/>.

ITRC Technical and Regulatory Guidance for In Situ Chemical Oxidation of Contaminated Soil and Groundwater (Second Edition, ISCO-2). View or download at:

<http://www.itrcweb.org/ISCO-2.pdf>

API Interactive LNAPL Guide. Download at <http://groundwater.api.org/Inaplguide>

(Tech Direct - 2/1/05)

SUPREME COURT TO HEAR TENANTS MOLD CASE

Washington, D.C., March 3, 2005 (ENS)- The U.S. Supreme court said in March it will hear a case brought by renters who claim they were injured by toxic mold in their Virginia apartment. The high court intends to use the case to clarify whether plaintiffs can sue in federal or state court.

In February, President George W. Bush signed legislation that keeps class-action lawsuits seeking \$5 million or more out of state courts unless the primary defendant and more than one-third of the plaintiffs are from the same state.

If fewer than one-third of the plaintiffs are from the same state as the primary defendant, and more than \$5 million is at stake, the case would go to federal court.

At issue in the case the Supreme Court will hear is whether Virginia renters Christophe and Juanita Roche can sue their landlord, Lincoln Property Co., in Virginia state court over exposure to toxic mold in their apartment. The Dallas, Texas company has a subsidiary in Virginia.

The Roches allege they suffered chronic headaches, memory loss and respiratory trouble due to the mold. They complain that when their apartment was being treated to remove the mold, some of their belongings disappeared.

FEDERAL REGULATORY UPDATES (CONTINUED)

The 4th U.S. Circuit Court of Appeals based in Richmond, Virginia ruled the Roches could sue in Virginia, on grounds that Lincoln was a "citizen" of the state because its subsidiary conducted business there.

Lincoln's appeal of that ruling is supported by business groups, who argue that the 4th Circuit's ruling would unfairly expose them to litigation in state court.

(Environment News Service, 3/3/05)

EPA SET STRICT LIMITS ON POWER-PLANT EMISSIONS

The Environmental Protection Agency has approved sharp new limits on power-plant emissions that cause soot, smog and acid rain in the eastern half of the country.

The Clean Air Interstate Rule is designed to help 450 pollution-plagued counties, most of them in urban areas, clear their air over the next decade. Jeff Holmstead, assistant administrator in charge of EPA's air-regulation programs, said the rule will produce "the biggest pollution reductions in the last 15 years."

The rule addresses a complaint by East Coast cities and states that they can't meet the agency's clean-air standards, set for sulfur dioxide and

nitrogen oxides, because much of the pollution is blow in from neighboring states. The biggest source of the pollution- and the focal point for some of the new emission cuts-are coal-fired power plants in the Midwest and southern states.

Complying with the rule, imposed under the Clean Air rule, imposed under the Clean Air Act, will require power plants in 28 states and the District of Columbia to cut sulfur-dioxide emissions by 70% over 2003 levels by 2015. They also have to make a 60% cut in nitrogen oxides, which turn into smog in the atmosphere. Mr. Holmstead estimated that the rule will cost companies at least \$3.6 billion a year over the next 10 years.

EPA estimates that cleaner air in metropolitan areas will result in \$85 billion to \$100 billion in health benefits over the next decade. Mr. Holmstead said reduced levels of smog and soot, which aggravate heart and lung problems, will mean 17,000 fewer premature deaths annually and 1.7 million fewer lost work days.

The utility industry would have preferred the Bush Administration's Clear Skies act, which imposes nationwide regulations and amends the Clean Air Act. That measure is stuck in a Senate committee. The Edison Electric Institute, which represents most of the industry, said it "supports

the overall approach" of the Clean Air Interstate Rule. The National Association of Manufacturers called the new rule "the best available regulatory alternative" to clear skies.

(By John J. Fialka, Wall Street Journal, 03/11/2005)

EPA TO PROVIDE FURTHER CLARIFICATION OF NSR APPLICABILITY

In the midst of ongoing legal challenges to several aspects of its December 2002 NSR rulemaking, EPA has indicated that it will propose another rule to clarify NSR applicability. The new rule will focus on three circumstances in which NSR may be triggered. Specifically, the rule will clarify NSR applicability to "debottlenecking" scenarios, when a modification in one unit at a facility may cause production to increase at other units within the facility and thereby increase emissions. The rule will also clarify "aggregation" scenarios, when simultaneous modifications at several units at a facility must be considered one modification for purposes of determining NSR applicability. Finally, the rule will clarify whether plantwide applicability limits will be based on allowable or actual emissions. EPA has indicated that it will begin work on the NSR clarifying rule this year.

PENNSYLVANIA BULLETIN/UPDATE NOTICES

Interim Final:

Act 90 Waste Transportation Safety Program Placarded Authorization. Effective Date: May 22, 2004

Final Technical Guidance:

Guidance for Evaluating Alternate Recycle Return Locations Proposed under the Filter Backwash Rule. Effective Date: November 26, 2004

Final Technical Guidance:

DEP Permit Guide to Public Water Systems. Effective Date: December 31, 2004

Final Technical Guidance:

Environmental Justice Public Participation Policy. Effective Date: December 31, 2004

Technical Guidance:

Proposed Water Quality Permit for Sewer Extensions & Pumping Stations. See the January 15 Pennsylvania Bulletin.

Revision:

New Source Sampling Requirements for Groundwater Sources for Community and Nontransient - Noncommunity Water Systems. Effective Date: January 21, 2005.

Technical Guidance:

Water Quality Toxics Management Strategy. Effective Date: February 11, 2005.

Final Technical Guidance:

Residual Waste and Special Handling Waste Streams. Effective Date: February 11, 2005

Rescinded:

Form R and Form U Implementation Guidance. Effective Date: February 11, 2005

Rescinded:

Earth Disturbance Permit Policies and Procedures. Effective Date: February 11, 2005

Draft Technical Guidance:

Consumer Confidence Report Handbook Community Water Suppliers. Effective Date: February 14, 2005.

Final Technical Guidance:

Turbidity Instructions for Public Water Systems Using Filtered Surface Water or Groundwater. Effective Date: February 18, 2005.

Final Technical Guidance:

New Source Sampling Requirements for Surface Water Sources. Effective Date: February 25, 2005.

Final Technical Guidance:

Surface Water Protection - Underground Bituminous Coal Mining Operations. Effective Date: February 25, 2005.

Final Technical Guidance:

Compliance/Enforcement Procedures coal and industrial mineral mining sites. Effective Date: March 4, 2005.

Final Technical Guidance:

Coal Civil Penalties. Effective Date: March 4, 2005.

Draft Technical Guidance:

Pennsylvania's Interim Program for Operator Certification. Effective Date: March 4, 2005.

Draft Technical Guidance:

Construction and Operation Permits Guidance under the safe drinking water management programs. Effective Date: March 4, 2005.

Final Technical Guidance:

Conventional Bonding for Land Reclamation - Coal. Effective Date: March 11, 2005.

Final Technical Guidance:

Bureau of Deep Mine Safety's Compliance/Enforcement Procedures. Effective Date: March 11, 2005.

Draft Technical Guidance:

Land Maintenance Financial Guarantees. Effective Date: March 11, 2005.

Final Technical Guidance:

Validating Abandoned Underground Mine Maps and Establishing Barrier Pillars. Effective Date: March 18, 2005.

Final Technical Guidance:

Guidelines for Identifying, Tracking and Resolving Violations for Air Quality. Effective Date: March 18, 2005.

Final Technical Guidance:

Pennsylvania Drinking Water Information System (PADWIS) Laboratory Sample User's Manual. Effective Date: March 18, 2005.

NJ REGULATORY UPDATES

NEW JERSEY GOVERNOR CODEY SIGNS BILL TO PROVIDE LIABILITY PROTECTION FOR NATURAL RESOURCE DAMAGES AND OFFSITE CONTAMINATION

On January 20, 2005, Governor Codey signed into law, a "Brownfields Innocent Landowner Amendment" to the New Jersey Spill Compensation and Control Act ("Spill Act") that will provide liability protection for Natural Resource Damages ("NRDs") and offsite contamination to certain owners of real property located within New Jersey. The goal of the Brownfields Innocent Landowner Amendment is to promote redevelopment projects on abandoned, contaminated industrial or commercial sites known as "brownfield properties." In particular, the Brownfields Innocent Landowner Amendment will provide liability protection from claims for NRDs and offsite contamination to individuals and firms that acquire brownfield properties but were not responsible for causing the original contamination on the properties.

To the great alarm of landowners and developers, but with the support of environmental groups, New Jersey recently has become a national leader in pursuing NRD claims.

The Brownfields Innocent Landowner Amendment to the Spill Act provides that owners of real property that was acquired on or after January 6, 1998 - the effective date of the New Jersey Brownfield and Contaminated Site Remediation Act ("BCSRA") - will not be liable for payment of compensation for damage, loss, or restoration of natural resources on or off the property in connection with the discharge of a hazardous substance at the property if:

1. the owner acquired the property after the discharge of the hazardous substance has occurred;
2. the owner did not discharge the hazardous substance, is not in any way responsible for hazardous substance, and is not a corporate successor to the discharge or to any person in any way responsible for the hazardous substance or to anyone liable for cleanup and removal costs pursuant to the Spill Act; and,
3. the owner has not, by contract, assumed the liability for natural resources that were injured by a discharge of hazardous substances at the property.

For more information on NRD Claims, call RT's Craig Hopkins at (856) 467-2276

(Staying Ahead with Saul Ewing - 01/05)

NEW JERSEY OFFERS FUNDING FOR OPEN SPACE PRESERVATION

Funds for land acquisition and park development are once again available in New Jersey. Department of Environmental Protection (DEP) Commissioner Bradley Campbell has opened the DEP Green Acres programs's spring 2005 funding round.

"I encourage local and nonprofit groups to take advantage of this chance to invest in New Jersey's quality of life by preserving natural and historic resources and recreational space," said Acting Governor Richard Codey.

Eligible land acquisition projects include the purchase of natural areas, historic sites, conservation areas, water bodies, and open space for active or passive recreation purposes.

Funding is also available for the development of outdoor park and recreation facilities. Eligible recreational projects include facilities that provide boating, fishing, swimming, outdoor games and sports, biking, picnicking, camping, or nature interpretation. Related costs incurred as part of the acquisition or development project also may be eligible for reimbursement.

"The availability of additional Green Acres funding presents an excellent opportunity for local and nonprofit groups to advance their recreation and conservation priorities," said Campbell. "I look forward to forming new partnerships and strengthening existing relationships with local and nonprofit officials who share DEP's interest in expanding New Jersey's network of protected open space."

Funding is available for land acquisition and park development projects in more populated communities. This round, funding incentives again will be offered to Densely Populated municipalities and counties with 5,000 or more people per square mile, Highly Populated counties with 1,000 people per square mile, and Highly Populated municipalities with total populations over 35, 000. Urban Aid municipalities also will be eligible for additional funds.

Local governments that lack an open space tax are eligible for 25 percent matching grants for land acquisition projects, whereas local governments with an open space tax qualify for 50 percent matching grants for such projects.

The demand for local acquisition and development funding continues to exceed by far Green Acres' available funding.

(Env. News Service - 1/5/05)

NJDEP REVISING GROUND WATER QUALITY STANDARDS

The New Jersey Department of Environmental Protection DEP is proposing to recodify and amend the Ground Water Quality Standards (GWQS) rules that govern the quantities of some 200 chemicals allowed in the state's ground water from acenaphthene to zinc.

Some pollutant standards will be stricter than existing standards, some will be less stringent, some are unchanged, and some substances are deleted from the list of regulated pollutants, based on current scientific information.

The proposed amendments that result in the standards being made less stringent are "not anticipated to have any adverse environmental impacts," the DEP said.

The amended Ground Water Quality Standards may affect the remediation of contamination sites to extent that a remediator may have to modify a remediation plan to address previously unregulated ground water constituents or to remediate ground water to achieve a more restrictive standard.

New remediation standards will be applied to new cases and to cases for which the responsible party had not submitted a remedial action workplan or similar document at time the amended GWQS become effective.

Written Comments were due by last December.

(Env. News Service - 11/10/04)

MCGREEVEY DERAILS FAST TRACK FOR SMART GROWTH

In one of his last official acts, Governor McGreevey signed Executive Order No. 140 on November 5, significantly delaying implementation of new legislation designed to fast track many development permit applications in areas designated for smart growth in New Jersey. The legislation, known as chapter 89 of 2004, was suppose to become effective on November 6, 2004.

The fast track law, which approved on July 9, 2004, provides that projects within smart growth areas applying for development permits from the Department of Transportation (DOT), Department of Community Affairs (DCA), and the Department of Environmental Protection (DEP) are subject to expedited processing. "Smart growth areas" include planning areas 1 and 2 and centers designated under the State Development and

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- Rail Carrier Solid Waste Exemption, Pg. 16
- New Radon Guide, Pg. 16

Redevelopment Plan (SDRP); growth centers in endorsed plans approved by the State Planning Commission and the Pinelands Commission; urban enterprise zones; municipally designated redevelopment areas approved by DCA; and their similar areas designated by the DEP.

Under the fast track law, applications made to the DOT, DCA, or DEP for permits in smart growth areas are supposed to proceed on an expedited basis under the administration of a newly created Division of Smart Growth in each agency. A special fee will cover the cost of expedited review.

Under the Executive Order 140, however, there will be a significant delay before an agency may even accept applications for expedited review. The Order adds a new element to the rulemaking process with respect to the program for qualifications and registration of professionals. It requires the agencies to first file a notice of pre-proposal with the Office of Administrative Law, in order to elicit the views of interested parties concerning the rules for qualifications and registration of professionals. A 90 day public comment will follow, and then within 120 days of the close of the public comment period the agencies must file their proposed rules with the Office of Administrative Law for additional public notice and comment, which lasts for at least another 60 days. Only after the rules have been adopted according to this procedure can the DOT, DCA, or DEP begin to review any permit application made under the new fast track legislation.

Although the effective date of the legislation was suppose to be November 6, the Executive Order requires an additional delay of nine months to a year before expedited permit application may be considered and granted, assuming that the agencies adhere to this timetable and there are no further delays.

The order also provides that in setting standards for technical completeness of permit applications, the departments shall include requirements for reasonable notice and opportunities for public comment. An application lacking either of these two requirements will not be eligible for processing under the fast track legislation.

(By Richard M. Hluchan- Ballard Spahr - 11/04)

NEW JERSEY CLEANUP MAY TEST NEW STRATEGY FOR COST CONTRIBUTION SUITS

New Jersey officials' efforts to require liable parties to remediate a former military ordnance-making site could test whether settling plaintiffs can use an alternative provision of Superfund law recover cleanup costs after the Supreme court limited the more widely used part of the law in its Aviall ruling.

The case could test whether administrative settlements are sufficient to meet requirements in alternative sections of the law for settling plaintiffs to bring contribution suits against non-compliant parties.

The strategy is one of several attorneys are considering to skirt new hurdles imposed by Aviall, although many attorneys are skeptical that alternative approaches will work.

Before the Aviall decision, companies generally sued other liable parties for cleanup contributions under Superfund's section 113 (f)(1). But the Supreme Court's decision in Cooper Industries, Inc. Aviall Services Dec. 13 ended this approach, ruling

NJ REGULATORY UPDATES (Continued)

that parties that voluntarily remediate contaminated sites may not sue under 113 (f)(1) unless the government had compelled the cleanup through litigation. The ruling is based on a strict interpretation of the section's language, which says parties may seek contribution from other liable parties "during or following any civil action."

In *Aviall*, the Supreme Court declined to rule on whether section 107 allows polluters to sue other liable parties for cleanup contributions, and sent that portion of the case back to the U.S. Court of Appeals for the 5th Circuit for reevaluation.

Many observers believe the ruling will hinder voluntary cleanups and redevelopment because regulators must first file litigation before parties agree to conduct cleanup. Such litigation is burdensome on industry, while an EPA source says the agency does not have the resources to file such suits. This is already emerging as a major hurdle in industry efforts to bring contribution claims against the military.

In an effort to bypass the court's requirements, regulators, industry and local government officials are testing whether plaintiffs may still be able to bring contribution claims against non-settling parties using alternative authorities in the law. For example, section 113(f)(3)(b) permits parties who have resolved liability with the United States or a state in "an administrative or judicially approved settlement" to seek contributions from a person who is not part to the settlement.

To expedite such settlements, regulators are considering whether EPA and state regulators can use administrative enforcement orders, rather than judicial orders, as a way of quickly reaching such settlements so that parties can clean up sites and pursue contribution claims.

For example, EPA officials were recently considering revising their unilateral enforcement orders issued under section 106 of the law to allow parties to quickly settle their liability with the agency. The new orders would be "self-executing," one source says.

In New Jersey, the Department of Environmental Protection (NJDEP) Dec. 29 issued a directive under the state's Spill Compensation and Control Act ordering the Navy and two private parties - Maxxam Group, Inc. and the Cranbury Development Corp. - to clean up contamination at the Unexcelled Chemical Site in Cranbury Township. One industry source says settlements required by the order could be the basis for contribution claims against non-compliant parties under section 113(f)(3)(b).

Maxxam is the successor company to the Unexcelled Chemical Corp., which used the site to make ordnance for the Navy during and after World War II, according to the order. The Navy funded new equipment acquisitions and the United States held title to several buildings on the site. Unexcelled Chemical ceased operations on the site in 1954 following an explosion and fire. The facility was demolished and abandoned, but today, it is considered prime real estate, and NJDEP official says.

NJDEP's order requires all three parties to "memorialize their commitment to perform the remediation in an Administrative Consent Order." One industry source says this consent order will lay the groundwork for the private parties to later file contribution claims against the Navy if it refuses to comply with the order - a scenario that the source calls likely. A Navy spokesman did not respond to requests for comment.

(Defense Environment Alert - 1/25/05)

NEW RULES EXEMPT RAIL CARRIERS FROM SOLID WASTE PERMITTING IN NJ

On November 15, NJDEP adopted new regulations for the transfer of solid waste by rail carriers. Rail carriers that may avail themselves of this exemption include providers of rail transport, as well as the contractors, agents, and affiliates of rail carriers who perform the waste transfer operations on behalf of the rail carriers. The regulations provide an exemption from solid waste permitting requirements and the requirement to obtain a certificate of public convenience and necessity for a rail carrier that transfers containerized or non-containerized solid waste to or from rail cars. However, the regulations also impose operational requirements upon rail carriers, including recordkeeping and reporting requirements, environmental standards, and a requirement that NJDEP be notified prior to the commencement of facility operations.

(Marks, Gold, Katcher & Fox Client Alert - 12/04)

NEW RADON GUIDE FROM NEW JERSEY DEP HELPS REMEDIAL EFFORTS

NJDEP released new radon testing guidance that includes a statewide, three-category tier system that will be used to better protect the public from exposure to this harmful naturally occurring gas. Radon mitigation systems can be installed at an average cost of \$1,200. DEP provides a list of certified businesses that offer testing and mitigation services. Do it yourself test kits also can be obtained from many hardware stores and local health departments.

All radon test results conducted in New Jersey are reported to DEP by certified companies performing the tests or that manufacture test kits. This data is used to classify municipalities into three-tier system according to the potential for identifying homes with indoor radon problems. The Department determines the number of homes in which a radon test was performed and the percentage of those homes with a test result that was greater than or equal to the guidance level of four (4) picocuries per liter (pCi/L).

The average indoor radon level in the United States is about 1.3 pCi/L. At the level of 4 pCi/L, DEP recommends a homeowner consider steps to reduce long-term exposure to radon gas.

The tier system classifies municipalities as having high (Tier 1), moderate (Tier 2) or low (Tier 3) potential for indoor radon levels. DEP will provide municipalities whose radon designation was upgraded to Tiers 1 and 2 with materials to develop an outreach program for homeowners. Activities to increase awareness about the need for testing include local proclamations, news flyers and presentations to community groups.

New construction in Tier 1 municipalities must incorporate radon resistant construction techniques as required by the Radon Hazard Subcode, which is administered by the New Jersey Department of Community Affairs. The techniques, which help prevent radon from entering buildings, are simple and inexpensive ways to reduce radon levels in homes.

The criteria for a Tier 1 municipality designation is at least 25 homes tested with 25 percent or more having radon concentrations greater than or equal to 4 pCi/L. Tier 2 towns have at least 25 homes tested with 5 to 24 percent having radon concentrations greater than or equal to 4 pCi/L. Tier 3 towns have at least 25 homes tested with less than 5 percent having radon concentrations greater than or equal to 4 pCi/L.

(Env. Tip of the Week - 1/21/05)

NEW JERSEY ADOPTS STRONGER MERCURY IN AIR AND ARSENIC IN WATER STANDARDS

New Jersey Department of Environmental Protection (DEP) introduced new standards intended to reduce mercury emissions from certain facilities by up to 90 percent by the of 2007. These latest rules will effectively halve the acceptable limit of arsenic in drinking water by 2006.

The rules give plants the option of meeting the standards in 2012 if they also make major reductions in their emissions of sulfur dioxide, nitrogen oxides, and fine particulates.

A 75 percent reduction of mercury emissions from the states's six iron and steel melters by the end of 2009 is also mandated. State estimates show that iron and steel manufacturing plants are the largest New Jersey-based sources of mercury emissions with much if the materials coming scrap metal from shredded automobiles.

The rules call for a further reduction of mercury emissions of at least 95 percent below recorded 1990 levels from New Jersey's five municipal solid waste (MSW) incinerators by 2011.

Additionally, the mercury rules contain standards for medical waste incinerators that are already being met by the three facilities operating in New Jersey. These protective standards will ensure that the incinerators continue to minimize mercury emissions, allowing for a maximum level of emissions that is one-tenth the current federal limit.

Going into effect in January, 2006, the state's new arsenic rules establish a maximum contaminant level of five parts per billion (ppb) for arsenic concentrations in drinking water. No other state had adopted as protective an arsenic standard.

New Jersey requires monitoring for arsenic at more than 600 public community water systems and 900 non-transient, non-community systems, which combined serve around 85 percent of the state's population. Based on past data, the DEP predicts approximately 34 community and 101 non-community systems will have arsenic levels exceeding the new 5-ppb standard.

In addition, the new state arsenic standard will apply to private well owners regulated under New Jersey's Private Well Testing Act, requiring notification of consumers about arsenic concentrations during real estate transaction and when rentin property.

(Env. Tip of the Week - 11/19/04)

INDUSTRIAL NEW JERSEY CITY MONITORED FOR AIR TOXICS

The Environmental Protection Agency announced a \$500,000 grant to the New Jersey Department of Environmental Protection (NJDEP) for an Urban Community Air Toxics Monitoring Project.

The state agency will measure and track air toxics coming from industrial, commercial and mobile sources in the highly industrialized urban area of Paterson, the third largest city in the state. The information collected will help environmental officials better address public exposure to, and risk from, toxic air pollutants.

"New Jersey Department of Environmental Protection had one of the strongest applications for the air toxics monitoring grant in the country," said EPA Acting Regional Administrator Kathleen Callahan. "The first step in addressing harmful exposure to air toxics is understanding the risks. This project will further both Agencies' work to address the concerns of communities in industrialized areas."

"This monitoring project is a good example of governments working together for a common cause: protecting the health of residents exposed to

NJ REGULATORY UPDATES (Continued)

hazardous air pollutants in industrialized urban areas," said DEP Commissioner Bradley Campbell. "This air toxic initiative is particularly important in Paterson, where children suffer from a higher rate of asthma and are the most vulnerable to air pollution."

The DEP, along with the Environmental Occupational Health and Sciences Institute, will use advanced techniques to measure air toxics. Also called hazardous air pollutants, air toxics are known or suspected to cause cancer or other serious health effects or adverse environmental impacts.

The state and federal agencies selected Paterson, in Passaic County, for the Air Toxics Monitoring Project because it is an urban community with a high population density and an elevated level of asthma in children living in the area.

This study will serve as a pilot project so NJDEP and the local community can better address exposure and risk issues related to air toxics. NJDEP's partnership with the Environmental Occupational Health and Sciences Institute will enable the development of new and advanced ways for measuring air toxics.

(Env. News Service - 1/19/05)

INDUSTRY CONSIDERS HIGH COURT REVIEW OF LANDMARK NJ CHROMIUM CLEANUP ORDER

A major manufacturing company may appeal an unprecedented federal appellate ruling that industry officials say will allow courts to determine cleanup remedies without input from regulators, claiming the ruling may force much more stringent cleanups that are necessary to protect public health. This "very frightening" precedent could lead courts to approve remedies that are "extravagantly more expensive than necessary to protect human health," an industry source says. The excavation and removal of the waste at the site is estimated to cost upwards of \$400 million because of the court decision, the source says. In the case, the U.S. Court of Appeals for the 3rd Circuit on Feb 18 affirmed a lower court's injunction requiring Honeywell International, Inc. to excavate and remove 1.5 million tons of hexavalent chromium, a known carcinogen, from a tidal wetlands site along New Jersey's Hackensack River.

A Honeywell source says the company is currently considering its options, which could include a petition for review by the full 3rd circuit or an appeal to the Supreme court.

One industry source says the decision is the first where an appellate court has chosen a remedy without input from an administrative agency. Traditionally, courts would remand remedy decisions to the agencies when they found cleanup plans ineffective, the source explains. Other industry officials say the court's decision to uphold a remedy sought by community groups overrode administrative procedure and usurps state and federal agency authority.

In *Interfaith Community Organization v. Honeywell International, Inc.*, et al., the court upheld a district court decision that the community group had proven an "imminent and substantial endangerment" to health or the environment, providing the basis for a citizen's suit under the Resource Conservation & Recovery Act (RCRA). In reaching this conclusion, the court said the community group's expert testimony was "credible."

Specifically, the court affirmed the lower court's finding that the concentrations of hexavalent chromium in the soil at New Jersey site far exceeded state standards, and existing exposure pathways for the waste made removal necessary. Concentrations are high as 17,900-22,100 part per million (ppm) at the site, and average 7,800 ppm, the court concluded. By contract, the New Jersey Department of Environmental Protection (NJDEP)

allows a maximum of 240 ppm.

The lower court also determined that excavation and removal of these wastes was necessary to eliminate the threat posed by hexavalent chromium. While Honeywell challenged that decision, the 3rd Circuit upheld the remedy, arguing that experts during the trial had presented all possible remedial options and, based on their testimony, it was clear that excavation was the only appropriate remedy. The court also noted that Honeywell did not rebut this testimony.

The court also affirmed that district court's finding that court actions was necessary because NJDEP was unable to address what the court described as "dilatatory tactics" on Honeywell's behalf. The 3rd circuit echoed that district court's concern that 20 years after the waste was discovered, NJDEP had not developed a schedule for a permanent remedy at the site. "The evidence demonstrates a substantial breakdown in the agency process that has resulted in twenty years of permanent cleanup inactions," the court concluded.

Honeywell challenged the finding in its briefs, arguing that the lower court improperly overrode an ongoing administrative process and usurped agency power. But the 3rd Circuit rejected both arguments. "Enough time has already been spent in the history of this matter and the time for a clean-up has come," the court concluded.

The court also found that RCRA does not preclude a court's involvement just because of the presence of an administrative agency. To make its point, the 3rd Circuit cited the legislative record of RCRA, which says, "Citizens need to exhaust or rely upon other resources or remedies before seeking relief under these amendments."

And the 3rd Circuit held that the court had not usurped agency power because there is no longer language in RCRA precluding a court-ordered injunction. The 3rd Circuit cited Supreme court precedent that a court's jurisdiction "is not to be denied or limited in the absence of a clear and valid legislative command."

(Superfund Report- 02/05)

NEW STORMWATER REGULATIONS CREATE HURDLES FOR DEVELOPERS

Developers in New Jersey must now cope with new regulations issued by the Department of Environmental Protection that establish an entirely new framework for stormwater management. These regulations contain design and performance standards addressing the quantity and quality of stormwater that can be diverted from a developed site. In addition, the regulations establish special protection measures that effectively create a 600 ft. buffer around certain streams.

The provisions of primary interest do developers include the following six areas:

Scope: The design and performance standards are applicable to "major developments" which are defined as developments disturbing one or more acres of land, or increasing impervious surface by one-quarter (1/4) acre or more.

Ground Water Recharge: Under prior practice, storm water management typically involved collecting the water and piping it to an off-site collector system as soon as possible. The new regulations adopt a different focus. They require that stormwater plans maintain the existing level of on-site infiltration or "re-charge." If a recharge area with proper soils is available on the site, this requirement can be easily met. However, if no such area is available, alternative means of compliance must be developed.

Water Quality: Storm water management systems must now be designed to reduce the post-construction load of total suspended solids (TSS) in storm water run-off by eighty percent (80%) of the

anticipated load, or satisfy certain alternate standards. This is an entirely new requirements that can greatly complicate and increase the cost of stormwater management.

Non-Structural Strategies: Stormwater systems must now meet erosion control, recharge and water quality standards, to the maximum extent practicable, by utilizing non-structural strategies. Typical examples of non-structural strategies include overland flow over vegetated area and basin infiltration. Other strategies involve low impact site design techniques that could substantially impact the development of the site. Previously common and inexpensive solutions such as centralized detention basins may no longer be acceptable.

Stream Protection: Among the most drastic of the new provisions is the establishment of "special water resource protection areas" extending 300 ft. on each side of Category One waters and their tributaries. Category One waters are those designated for protection by DEP because of their aesthetic, ecological, recreational or water supply significance. It has been estimated that more than 6,000 miles of the New Jersey's waterways are subject to this new buffer requirement. Identifying the protected waters can be difficult, since there is not official map, and the tributary streams often cannot be easily ascertained. Under limited circumstances, the 300 ft. width can be reduced, but only to 150 ft.

Exceptions: The regulations contain numerous, detailed exceptions, exemptions, waivers and grandfather provisions. The most significant are:

- Not subject to the new regulations are projects which received, prior to Feb. 2, 2004, both a final site plan or subdivision approval and a DEP permit which included stormwater management review.
- The groundwater recharge requirements are not applicable to projects in previously developed areas delineated on the State Plan Policy Map as the Metropolitan Planning Area (PA1) or a designated center.
- Stormwater from areas of high pollutant loading is not to be recharged.
- Certain linear development projects (such as utilities and roads) may be exempt from the recharge, quantity and quality requirements.

In the past, stormwater management has generally not been a barrier to development. However, under the new regulations, stormwater management issues could easily make a site undevelopable. Stormwater management must be considered at an early stage by all developers, and should be a critical element in all due diligence examinations.

David R. Oberlander, counsel at Flaster/Greenberg P.C. is a member of the law firm's Real Estate Practice Group. If you have questions about the new stormwater regulations or other legal matters regarding land development, he can be reached at (856) 661-2283.

(Reprinted from the NJ PA Real Estate Journal - 03/10/05)

NJ PROPOSES EXEMPTION FROM CLEANUP LIABILITY AT SUPERFUND SITES TO DE MINIMIS PARTIES

NJ has proposed to reduce liability for persons who did not know of contamination when they purchased a site and for those who only contributed the minimal amounts of substances at clean up sites. Key positions of the proposed law include:

A person, including an owner or operator of a major facility, who owns real property acquired on or after September 14, 1993 on which there has been a discharge, shall not be liable for cleanup and removal costs or for any other damages to the State or to any other person for the discharged hazardous substance pursuant to subsection c. of this section or pursuant to civil common law, if that person can establish by a preponderance of the evidence that

NJ REGULATORY UPDATES (Continued)

subparagraphs (a) through (d) apply, or if applicable, subparagraphs (a) through (e) apply:

(a) the person acquired the real property after the discharge of that hazardous substance a the real property;

(b) (i) at the time the person acquire the real property, the person did not know and had not reason to know that any hazardous substance had been discharged at the real property, or (ii) the person acquired the real property by devise or succession, except that any other funds or property received by the person from the deceased real property owner who discharged a hazardous substance or was in any way responsible for a hazardous substance, shall be made available to satisfy the requirements of P.L. 1976, c.141, or (iii) the person complies with the provisions of subparagraph (e) (2) of the subsections;

(c) the person did not discharge the hazardous substance, is not in any way responsible for the hazardous substance, and is not a corporate successor to the discharger or to any person in any way responsible for the hazardous substance or to anyone liable for cleanup and removal costs pursuant to this section;

(d) the person gave notice of the discharge to the department upon actual discovery of that discharge.

To establish that a person had no reason to know that any hazardous substance had been discharged for the purposes of this paragraph (2), the person must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property. For the purposes of this paragraph (2), all appropriate inquiry shall mean the performance of a preliminary assessment, and site investigation, if the preliminary assessment indicated that a site investigation is necessary, as defined in section 23 of P.L.1933, c.139 (C.58:10B-1), and

performed in accordance with rules and regulations promulgated by the department defining these terms.

Nothing in this paragraph (2) shall be construed to alter liability of any person who acquired real property prior to September 14, 1993; and

(e) For the purposes of this subparagraph the person must have (I) acquired the property subsequent to a hazardous substance being discharged on the site and which discharge was discovered at the time of acquisition as a result of the appropriate inquiry, as defined in this paragraph (2), (ii) performed, following the effective date of P.L. 1997, c.278, a remediation of the site or discharge consistent with the provisions of section 35 of P.L.1993, c.139 (C.58:10B-12), or, relied upon a valid no further action letter from the department for a remediation performed prior to acquisition, or obtained approval of a remedial action workplan by the department after the effective date of P.L.1997, c.278 and continued to comply with the conditions of that workplan, and (iii) established and maintained all engineering and institutional controls as may be required pursuant to section 35 and 36 of P.L.1993, c.139. A person who complies with the provisions of this subparagraph by actually performing a remediation of the site or discharge as set forth in (ii) above shall be issued, upon application, a no further action letter by the department. A person who complies with the provisions of this subparagraph either by receipt of a no further action letter from the department following the effective date of P.L.1997,c278, or by relying on a previously issued no further action letter shall not be liable for any further remediation including any charges in a remediation standard or for the subsequent discovery of a hazardous substance, at the site, or emanating from the site, if the remediation was for the entire site, and the hazardous substance was discharged prior to the person acquiring the

property. Notwithstanding any other provisions of this paragraph, a person who complies with the provisions of this subparagraph only by virtue of the existence of a previously issued no further action letter shall receive no liability protections for any discharge which occurred during the time period between the issuance of the no further action letter and the property acquisition. Compliance with the provisions of this subparagraph (e) shall not relieve any person of any liability for a discharge that is off the site of the property covered by the no further action letter, for a discharge that occurs at that property after the person acquires the property, for any actions that person negligently takes that aggravates or contributes to a discharge of a hazardous substance, for failure to comply in the future with laws and regulations, or if that person fails to maintain the institutional or engineering controls on the property or to otherwise comply with the provisions of the no further action letter.

(3) Notwithstanding the provisions of paragraph (2) of this subsection to the contrary, if a person who owns real property obtains actual knowledge of a discharge of a hazardous substance at the real property during the period of the person's ownership and subsequently transfers ownership of the property to another person without disclosing that knowledge, the transferor shall be strictly liable for the cleanup removal costs of the discharge and no defense under this subsections shall be available to the person.

RT recommends that parties purchasing properties in NJ complete Preliminary Assessments per NJ AC Chapter 7:26 E in lieu of Phase I Environmental Assessments, to take advantage of this proposed law. The law was sent to Governor Codey, who has 45 days to sign it.

([Http://www.njleg.state.nj.us/2004/Bills/S1000/682_U1.HTM](http://www.njleg.state.nj.us/2004/Bills/S1000/682_U1.HTM))

FEDERAL REGISTER NOTICES

<http://www.epagov/homepage/fedrgstr> Environmental Protection Agency

Environmental Protection Agency

National Pollutant Discharge Elimination System - Proposed Regulations To Establish Requirements for Cooling Water Intake Structures at Phase III Facilities; Proposed Rule. (Federal Register - 11/24/04)

Environmental Protection Agency

Control of Emissions of Hazardous Air Pollutants From Mobile Sources: Default Baseline Revision; Proposed Rule.

(Federal Register - 1/4/05)

Environmental Protection Agency

National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks. Partial Withdrawal of Direct Final Rule.

(Federal Register - 1/10/05)

Environmental Protection Agency

Toxics Release Inventory Reporting Forms Modification Rule: Proposed Rule.

(Federal Register - 1/10/05)

Environmental Protection Agency

TSCA Inventory Update Reporting Revisions: Proposed Rule.

(Federal Register - 1/26/05)

Environmental Protection Agency

Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Transportation Equipment Cleaning Point Source Category: Proposed Rule.

(Federal Register - 2/1/05)

Environmental Protection Agency

Implementation of the 8-Hour Ozone National Ambient Air Quality Standard - Phase 1: Reconsideration: Proposed Rule

(Federal Register - 2/3/05)

Environmental Protection Agency

National Emission Standards for Hazardous Air Pollutants for Leather Finishing Operations: Proposed Rule; amendments

(Federal Register - 2/7/05)

Environmental Protection Agency

Prevention of Significant Deterioration for Nitrogen Oxides; Proposed Rule

(Federal Register - 2/23/05)

Environmental Protection Agency

Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978; Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units; and Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units; Proposed Rule.

(Federal Register - 2/28/05)

Environmental Protection Agency

Approval and Promulgation of State Air Quality Plans for Designated Facilities and Pollutants, Commonwealth of Pennsylvania; Delegation of Authority for Commercial and Industrial Solid Waste Incinerator (CISWI) Units

(Federal Register - 3/4/05)

Environmental Protection Agency

Hazardous Waste Management System; Modification of the Hazardous Waste Manifest System; Final Rule.

(Federal Register - 3/4/05)

Environmental Protection Agency

Dioxin and Dioxin-Like Compounds; Toxic Equivalency Reporting; Community Right-To-Know Toxic Chemical Release Reporting. Proposed Rule.

(Federal Register - 3/7/05)

EPA PROPOSAL LIKELY TO BECOME NEW STANDARD FOR ENVIRONMENTAL DUE DILIGENCE

By Kermit Rader, Wolf, Block, Schorr & Solis-Cohen

For many years the standard for environmental due diligence has been that established by the American Society for Testing and Materials (ASTM®), with virtually no direct government involvement and no government commentary on the subject. The ASTM standard was developed to assist purchasers of property to qualify for the "innocent landowner" defense to Superfund liability. Currently lenders almost universally require that an environmental site assessment (commonly called a "Phase I") meeting the ASTM standard, be performed prior to extending financing for property acquisition. It is likely that this standard will soon be replaced with a standard established by EPA, which lenders and others almost certainly will require in the same manner as they required use of the ASTM standard in the past.

The Federal Brownfields Amendments of 2002 attempted to facilitate Brownfield development in several ways, including deference to state programs with respect to enforcement, expanding grants programs and establishing new defenses to Superfund liability for bona fide purchasers and contiguous property owners. To qualify for these defenses the Amendments require that a purchaser conduct "all appropriate inquiry" with respect to environmental conditions on the property prior to acquisition and that the inquiry comply with a standard to be promulgated by EPA. The bona fide purchaser defense is notable because it dramatically expands liability protection to cover contamination discovered during the "all appropriate inquiry" period. As a result, qualifying purchasers will have a defense even with respect to conditions they discover during due diligence. However, following acquisition, to maintain the defense the landowner must: (1) provide all required notices, (2) take reasonable steps to prevent continuing releases, (3) fully cooperate with investigatory and cleanup efforts, and (4) comply with any institutional controls. Thus, it is possible for a purchaser to have a defense at the time of acquisition and lose it thereafter.

EPA proposed a standard for all appropriate inquiry on August 26, 2004 (Referred to as Proposal), 29 Fed. Reg. 52542. The new EPA standard was prepared by a committee of stakeholders (Committee) representing a broad spectrum of interests through a process referred to as negotiated rulemaking. Given the breadth of interests involved in the Proposal's preparation and the lack of significant opposition, it is likely that the rule adopted by EPA will be very close to the Proposal. Therefore, we recommend that clients, particularly those who prepare or require large volumes of Phase I assessments, become familiar with EPA's proposal so that they can commence using the new standard as soon as it is adopted.

In general, the Proposal is a helpful commentary on how environmental due diligence should be conducted. The basic concepts underlying the new EPA standard are the same as current practice and large portions of the requirements are virtually identical. Several aspects of the standard are different, however, sometimes in subtle ways. Others are addressed in more detail or received different emphasis and, thus, these aspects of the Proposal warrant close attention. The following is a summary of these requirements. The aspects of due diligence not mentioned below are addressed by the proposal in a manner consistent with current practice.

Environmental Professional

The current ASTM standard only includes a general requirement that the professional performing the assessment have the training and experience necessary to do so. The Committee concluded that it needed to establish minimum qualifications for such professionals. Accordingly, the proposal includes a sliding scale of requirements for full-time relevant experience running from three years for professional engineers and

geologists to five years for those with a Bachelor's Degree in a relevant discipline, to ten years for those with any Bachelor's Degree in any field. The Committee decided, however, not to recognize the many certification programs maintained by independent professional organizations. Individuals not meeting these qualifications may participate in the preparation of the report provided they are supervised by the professional. The professional would be required to sign the report and render an opinion that he or she meets the definition of environmental professional and that the assessment was prepared in accordance with the standard. Prescribed language for these opinions is included in the proposal.

Timing of the Inquiry

The Proposal would establish a requirement that the inquiry be performed generally no more than one year prior to acquisition of the property. With respect to certain aspects of the inquiry, such as knowledge of the purchaser and relationship of price to condition of the property, information must be current at the time of acquisition. Certain other information, including interviews, lien searches, review of government records and visual inspection, must be updated if it is more than six months old. Prior studies, including those performed for the seller, can be relied upon by the professional, provided they satisfy these requirements. In contrast, the ASTM standard merely provides that assessments no more than 180 days old are presumed to be valid.

Objective of the Inquiry; Conditions vs. Releases

The Proposal would establish what are referred to as "performance factors" for all appropriate inquiry. The basic performance factor is that the inquiry gathers the information that is required for each standard practice that is publicly available, obtainable from its source within reasonable time and cost constraints, and which can practicably be reviewed. The following are the types of information that should be gathered about the subject property as part of all appropriate inquiry: (1) current and past property uses, (2) current and past use of hazardous substances; (3) waste management practices that could have caused releases; (4) current and past corrective actions; (5) engineering and institutional controls; and (6) nearby properties that have conditions indicative of releases. To the extent these objectives cannot be satisfied despite good faith efforts (referred to as Adata gaps®) the report must comment on their significance. The scope of information required to be assessed pursuant to the Proposal is somewhat broader than that required by the ASTM standard. The Proposal would require that the report determine the presence of releases and threatened releases, while the ASTM standard requires that "recognized environmental conditions" be identified, which are defined by ASTM by reference to a cleanup obligation.

Interviews

The Proposal would place an increased emphasis on interviews. As with the ASTM standard, an interview of the current owner and occupant would be required by the Proposal. In addition, the Proposal would require that interviews of others with relevant knowledge, such as current and past facility managers and past occupants, be conducted as necessary to meet the objectives of the inquiry. For abandoned properties, at least one neighbor should be interviewed. In the case of properties having more than one owner or occupant, the major occupants using hazardous substances should be interviewed. The Proposal does not suggest a set of questions; rather, the questions will depend on site-specific conditions and the extent of prior knowledge.

Record Searches

The ASTM standard requires identification of historic uses back to 1940 or the property's first obvious use, whichever is earlier. By contrast, the Proposal makes

no reference to obvious use. The Proposal would require inquiry relying on title documents, and use records, aerial photos, fire insurance maps and historical practices as far back as the property is known to have contained structures or was first used. As a result, particularly for properties with long histories, it may be necessary for the professional to invest more time identifying the earliest structure or first use. With respect to nearby properties, unlike the ASTM standard, the Proposal would allow minimum search distances to be adjusted at the discretion of the environmental professional to account for physical conditions and land use.

Title Searches

Title searches are identified by the ASTM standard as one possible source of information regarding historical uses. But it is left to the user of the assessment to conduct the title search and provide it to the environmental professional, which often is not done. The Proposal would specifically require that a search for recorded environmental liens be conducted and provided to the environmental professional. The professional would not be able to render the required opinion without the title search. Accordingly, once the standard is formally adopted, it will be important that the party requesting an assessment order a title search early in the process and make it available to the environmental professional to use as part of the investigation of historic uses.

Visual Inspection

The Proposal identifies the visual inspection of the property as the most important aspect of all appropriate inquiry. For that reason, the Proposal requires that the visual inspection be performed personally by the environmental professional signing the report, rather than merely under the professional's supervision. An inspection is not required in the rare circumstance in which access to the property is denied despite good faith efforts to obtain access. In that instance, an inspection must be conducted from the perimeter of the property. In contrast to current practice, which requires only that obvious conditions on adjoining properties be inspected, the Proposal also specifically requires that all adjoining properties be visually inspected from the subject property's boundary.

Relationship of Price to Value if not Contaminated

The ASTM standard requires that price be addressed only where it is known to be less than that of comparable properties. The Proposal, however, would require a determination of whether the price reflects market value. An appraisal is not required, and the objective of this determination is not to ascertain the exact value of the property. Like the title search, this aspect of all appropriate inquiry may be performed by the purchaser and provided to the environmental professional.

User Obligations

The Proposal would specifically require that the party relying on the assessment satisfy certain obligations. These obligations include conducting a title search, and identifying any specialized knowledge regarding the property, commonly known information and the relationship of price to value. Currently many assessments are prepared without the benefit of this information. In view of the opinion they must render, environmental professionals are likely to specifically request this information in writing from the user.

Degree of Obviousness of Contamination

While the Proposal does not address the circumstances in which sampling would be appropriate, it implies strongly that if contamination is obvious, sampling should be conducted as the next reasonable step and that failure to do so would jeopardize the defenses that may otherwise be available.

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KEY HIGHLIGHTS

FEDERAL UPDATES

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- EPA NOx Standards, Pg. 9
- EPA Amends Indoor Air Guide, Pg. 10
- More Brownfields Tax Relief, Pg. 12
- New Haz Waste Manifest, Pg. 13

PA UPDATES

- Residual Waste Revisions, Pg. 1
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- No Act 2 for Arsenic Ag Sites, Pg. 4
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- Haz Waste Revisions, Pg. 4

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- Tankless or Tank Water Heaters, Pg. 8
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