Vol. 15, No. 3, November 2007

The RT Review

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

• Environmental Engineers & Scientists • Geologists • Remedial Contractors

RTENV.COM

CLEANUP PRIVATIZATION MOVES UPWARD IN NEW JERSEY

RT is seeing a significant uptick in CLEANUP STAR projects, and the state, as indicated in prior editions in the RT Review is finalizing a program involving the privatized closure and remediation of unregulated underground storage tanks (USTs). The number of CLEANUP STAR projects at RT has risen from a rate of one or two a year, to one every month or two. In addition, due to the success of the Program, and leadership of its manager, Mr. Gary Sanderson, and Brownfields Chief Ken Kloo, potential remediators are becoming more and more comfortable with the program. DEP is reliably concurring with the final reports, as promised, in well under the planned thirty day time clock.

CLEANUP STAR projects themselves, are in many instances becoming larger. A recent project completed under Gary Brown's "CLEANUP STAR" oversight, was a project near Burlington, NJ, where dieldrin impacted soil was found. Although there was a possibility to mix the soil in-place, that approach would have required entering the site into the DEP Voluntary Cleanup Program, with a minimum six months timeframe for report approval. Instead, the site developer and selling party decided that a better approach would be to take the site through the CLEANUP STAR Program, and reuse the lower level impacted soil as cover material, at a nearby landfill. The time schedule for CLEANUP STAR speeded up of remediation, by more than 75%.

Other RT CLEANUP STAR projects have included small herbicide/pesticide releases near agricultural buildings, surface oil and waste oil releases, and solvent releases. The CLEANUP STAR Program can be used where there are impacts to soil, as long as all soil above the most stringent standards is removed. If there is any groundwater impact, it

(continued on page 2)

PENNSYLVANIA CONSIDERING BROWNFIELDS 75% COST REIMBURSEMENT APPROACH

Recent word from Harrisburg is that a Pennsylvania Legislator is proposing that the state begin implementing a 75% cost reimbursement approach for Brownfield sites, as has been the case in New Jersey for a number of years. Under the plan, 75% of eligible remedial costs at a site are reimbursed from taxes collected after redevelopment.

The New Jersey approach works as follows:

❖ A qualified redeveloper holds a meeting with the State, and presents his Redevelopment Plan.

❖ Site investigation work is completed to determine what remediation measures are needed at the site and evaluate cost.

❖ When redevelopment plans are at hand, projections are made with respect to the amount of state taxes that will be generated by new site occupants once the site is redeveloped.

❖ Eligible taxes include both state income tax and sales tax, from commercial or industrial activities.

❖ A special "state zip code" is set up, for the redevelopment area.

❖ 75% of the sales and income taxes collected are rebated, via a check from the state to the redeveloper, until 75% of eligible remediation costs are reimbursed.

❖ All future taxes generated by the redevelopment area then go the state, as they do at other sites.

The New Jersey program, which has been effect for approximately five years, provides a powerful economic incentive, because the state also has a number of "sprawl control" initiatives. Typically, to be approved by the state there have to be tangible redevelopment plans, and, an expected "payback" over a four to twelve year time.

With nearly 500 closed landfills needing attention, and with more than 15,000 contaminated sites overall, the New Jersey Legislature felt years ago that providing incentives for redevelopers to both remediate and make contaminated sites and landfills which were not properly closed productive, would be in the state's best interest.

Learning the wonderful lessons from New Jersey, where many sites have gone through the program, is causing Pennsylvania is considering a similar approach. Members of the public sometimes asks – why is the state using taxes to subsidize redevelopment? State politicals, however, see a different opportunity. The opportunity is that the state does not have sufficient funds to remediate thousands of contaminated sites, and, in addition to causing environmental degradation, of soil and groundwater, the contaminated sites produce no taxes. The long term view is that in a relatively short period of time, the following objectives are achieved:

❖ The site is properly remediated, under NJDEP oversight.

❖ Funds begin to flow in to support the tax base, to the local municipality involved, and the state begins to receive revenue after the reimbursement period is over.

❖ Depending of the size of the site, typically, tens, hundreds or thousands of acres of rural Greenfields space, don't have to be developed.

Although the New Jersey Program was at first slow to catch on, Pennsylvania's consideration of the program would clearly be a major step forward for its Remedial Award Winning Brownfields and Land Recycling Program. Due to the high Brownfields project experience level of the Pennsylvania Department of Environmental Protection Regional Offices, and leadership of DEP Deputy Secretary Jill Gaito, we believe that if the legislature acts, there would follow a significant uptick in redevelopment efforts, at Pennsylvania's most difficult sites. Taking the "lessons learned", from New Jersey, and applying them on a statewide basis for Pennsylvania's cities and towns, would simply be another step, in making Pennsylvania's Brownfields Program even better.

We'll keep you updated on this important issue in future editions of *RT Review.*

TABLE OF CONTENTS

Directory

Corporate Headquarters
215 West Church Road
King of Prussia, PA 19406
Phone: (610) 265-1510
FAX: (610) 265-0687
E-mail: RTENV@AOL.COM
World Wide Web: HTTP://RTENV.COM
24 HOUR
URGENT LINE SERVICE
800-725-0593
Gary Brown, P.E., President
Phone: (610) 768-0232
E-mail: GBROWN@RTENV.COM
Craig Herr, P.G.
Phone: (610) 265-1510 Ext. 15
Hydrogeology Group Manager
E-mail: CHERR@RTENV.COM
Walter Hungarter
Phone: (610) 265-5599
Engineering Group Manager
E-mail: WHUNGARTER@RTENV.COM
Glennon C. Graham, Jr., P.G.
Phone: (610) 265-1510 Ext. 13
Remediation Group Manager
E-mail: GGRAHAM@RTENV.COM

New Jersey
Justin Lauterbach
Phone: (856) 467-2276 Ext. 119
E-mail: JLAUTERBACH@RTENV.COM
Suite 306, Pureland Complex
510 Heron Drive, P.O. Box 521
Bridgeport, NJ 08014
Phone: (856) 467-2276
FAX: (856) 467-3476

Regional Partners
California
Bob Smyth
Phone: (856) 234-1730
FAX: (856) 234-4387

Massachusetts
Andy Irwin
Phone: (508) 653-8007
FAX: (508) 653-8194

Michigan
Michael Carlson
Phone: (248) 585-3800
FAX: (248) 585-8404

North Carolina
Phil Rahn
Phone: (336) 852-5003

Ohio
Ron Clark
Phone: (330) 375-1390 Ext. 207

Virginia
Edward Berg
Phone: (757) 599-6985
FAX: (757) 599-3501

CLEANUP PRIVATIZATION MOVES UPWARD IN NEW JERSEY

(Continued from page 1)

must be demonstrated that the impacted groundwater does not travel offsite.

The CLEANUP STAR Program can be used for a "sitewide" NFA, or, for individual areas of concern. The state Department of Environmental Protection pre-qualifies all CLEANUP STAR individual.

The state has now also announced that Subsurface Evaluators, licensed by the NJDEP can follow similar approaches, when responding to UST releases, in this state. A "Subsurface Evaluator" is a category of UST environmental licensing which has been effect for many years. Mr. Sanderson of the NJDEP will head up the unregulated UST Privatization Program as well.

A big bonus for NJDEP and its citizens is that the "fast track schedule" CLEANUP STAR and new, unregulated UST schedule approach is affording more complete remediations as many development and redevelopment clients don't mind spending extra budget, if the project can be run with a higher degree of completion confidence, and can be completed faster. RT anticipates that this trend will continue, as the state mulls over other options to make the NJDEP Remediation Program work better.

Assistant Commissioner Irene Kropp has taken initiatives to improve Site Remediation Program performance, and, during the summer and early fall, RT has noticed a significant increase in phone calls from NJDEP Case Managers, signifying a new commitment to complete remediation projects with better communication, and less emphases on lengthy comment letters which frequently are actually received after remediation is completed.

Case Managers at NJDEP are increasingly seeing the benefit of moving projects toward completion, and working with experienced environmental consultants, who can get the job done the way that DEP would to see it done.

New Jersey's reorganized SRP Program with increased privatization incentive is a significant improvement, particularly on the voluntary cleanup side. Although there still is a high case load, and long backlog of projects for DEP staff to continue to review, particularly at Industrial Site Recovery Act sites, important actions taken by DEP Commissioner Lisa Jackson, and Assistant Commissioner Irene Kropp, are going a long way to improving New Jersey's Site Remediation Program, which is everyone's best interest.

ASBESTOS CONTAINING MATERIALS O & M PLANS

BACKGROUND

In October, 1995, Occupational Safety and Health Administration regulations regarding asbestos containing materials (ACM) became more stringent. Because many buildings built before 1980 contain various types of ACM, it became required for the first time that building owners and managers make sure ACM Operations and Maintenance (O&M) plans be prepared to make sure that the material does not affect the health of building occupants, tenant, or maintenance workers. All buildings where vinyl asbestos tile, asbestos pipe insulation, sprayed on asbestos insulation, or other types of ACM (containing more than 1% asbestos), should now be covered by an O&M plan available on the premises.

WHY IS THE PLAN NEEDED?

The ACM O&M plan is a single document kept on the premises of each building which documents the location of the ACM, and is used to inform building occupants, tenants, and maintenance workers how they can avoid contact with and not disturb the ACM. If ACM O&M plans are not in effect, building owners incur liability because they are out of compliance with the federal OSHA regulations. Failure to have an O&M plan can result in fines from city, state or federal regulatory agencies, depending on how many agencies directly regulate ACM in each locality.

WHAT IS INVOLVED IN PREPARING AN O&M PLAN?

The O&M plan begins with a basic survey. Where the extent of ACM is already known, an O&M plan can be prepared without the need for a survey. To prepare the plan, an inventory of ACM is made up and further information is added to the O&M plan, including how frequently the materials should be inspected, what condition they are in, and what steps are necessary either to avoid contact, or otherwise how to avoid releasing asbestos fibers.

(Continued on page 18)

RT STAFF & PROJECT NEWS

Robert McKenzie is now Manager of RT's Building Services Group. Mr. McKenzie has performed environmental assessments for buildings for more than 17 years, including investigation of asbestos, lead, mold and other aspects of indoor air quality. Mr. McKenzie is a graduate of Miami-Dade College, and also studied Construction Management at New York University. Mr. McKenzie has in-depth experience in follow up remediation, when investigation work reveals problems which must be addressed. Mr. McKenzie is a Member of ASHRAE and the Indoor Air Quality Association. You can reach Rob at 856-467-2276, or at: rmckenzie@rtenv.com.

At *RT Review* press time, RT's sales continued strong, after the Philadelphia area was identified as having no problems related to sub-prime market woes. The Brownfields market, in New Jersey, in particular, is very strong.

Mark Cefalo and Larry Bily were wrapping up investigation work at a Philadelphia PCB site, which is being planned for redevelopment in stages. A regional transportation concern is evaluating the site for a new warehouse, with rail access. Jaccie Kopacz and Kristine Foldes are managing a major soil reuse project, involving the Bellmawr Redevelopment Site. They are being assisted by Burling VanNote, Jake Wilson, and Heather Emrich, as work continues over two shifts, as significant soil is needed at the Bellmawr as part of capping prior to redevelopment.

Chris Ward wrapped up investigation work at an Andalusia Site, scheduled for residential redevelopment. The facility had been an concrete processing facility, and several areas of fill, including historic fill, needed to be addressed. Adam Messner and Tom Donovan were continuing work at a large Philadelphia redevelopment site, completing soil delineation work for PCB impacts, as well as completing ongoing groundwater monitoring.

Peter Fredege has joined RT as Administrative Assistant, reporting to Jill Williams, in our King of Prussia Headquarters administrative staff. Also, Paul Frederick has rejoined RT on a full-time basis, in our Accounting Department.

Justin Lauterbach was evaluating a Northeastern Pennsylvania shooting range site, and also wrapped up successfully a Cleanup Star arsenic impacted soil project with Gary Brown, in Burlington County.

Josh Hagadorn and Gary Brown were evaluating a York County, PA, redevelopment site, involving work to evaluate permit conditions, and, prepare updated Contingency Plans, as the original owner, York International, reduced operations to a portion of the original large complex facility buildings. Craig Herr completed expedited evaluation work, for solvent impacted groundwater, which is being addressed by the seller under the Act 2 Land Recycling Program.

RT appreciates the opportunity to be of continued service to our clients, and should there be opportunities, we would appreciate the opportunity to be of service.

PA UPDATES

PENNSYLVANIA ONE CALL LAW UPDATED

Pennsylvania has updated its new One Call Law, which requires additional procedures for making utility locate requests for "Complex Projects".

definition, a "Complex Project" means an excavation that involves more work than properly can be described in a single locate request or any project designated as such by the excavator as a consequence of its complexity or its potential to cause significant disruption to lines or facilities and the public, including excavations that require scheduling locates over an extended timeframe." With the PA One Call Board of Director's recent Scope of Ticket adoption, a single locate request cannot exceed "1000 feet or intersection to intersection which ever is larger, along the same street and within the same political subdivision border".

How will a Complex Project operate? Act 181 of 2006 has left that up to the PA One Call Board of Directors and the PA One Call System, Inc. to decide. The only parameters of a Complex Project that are specifically addressed by the legislation are:

The excavator must make a Complex Project Notification to the One Call System at least ten business days before the beginning of excavation or demolition work;

A Preconstruction Meeting must be scheduled and conducted by the excavation (unless the excavator believes one is not necessary in which case the excavator must declare this when making the One Call notification. When this occurs, any facility owner with facilities at the site may request a meeting with the excavator and the excavator MUST attend);

Notice of the Preconstruction Meeting must be given sufficiently in advance so as to permit attendance, in person or electronically, by the excavator, facility owners, designers or their agents MUST attend the Preconstruction Meeting;

The meeting must include information sufficient to identify the scope of work;

The meeting must determine the schedule to locate underground facilities reasonably in advance of the actual start of construction or demolition for each phase of the work.

All parties planning and implementing projects, including those at Brownfield sites, and, for most projects involving significant utility construction, will need to follow the "Complex Project" rules.

(Excerpts from PUCA Newsletter - 2007)

PA CONSERVATION DISTRICTS ENDORSE BILL UPDATING DISTRICT LAW

The Pennsylvania Association of Conservation Districts, announced endorsement and support of Senate Bill 102 (Wonderling-R-Montgomery) which recodifies and updates Act 217, the law creating Pennsylvania's conservation districts.

Act 217, first enacted in 1945, was enacted to enhance conservation of Pennsylvania's natural resources. Since 1945 numerous environmental changes have occurred throughout the Commonwealth. During the last 60 years the conservation district role in local communities has evolved as well. Many natural resource programs have changed, others have been created more have been expanded to meet our citizen's growing needs.

Throughout the last half century, however, one constant has been the presence of conservation districts and their willingness to help local communities and citizens with their environmental concerns. Today, conservation districts are such an integral part of the local natural resource protection agenda that Sen. Wonderling and PACD have realized the need to again update Act 217, matching the growing responsibilities of conservation districts with the implementing law.

"This bill includes changes sought by PACD such as ensuring sufficient staff at the State Conservation Commission level, pro-training and state assistance to conservation district staff and updating the process for local conservation district board members appointed," said Victor Cappucci, President of PACD. "It is an honor to support Sen. Wonderling in his efforts to assist conserva-

PA UPDATES

tion districts by introducing Senate Bill 1020 and allowing conservation districts to make even greater strides toward conservation stewardship. I would like to publicly thank Senator Wonderling for his leadership and willingness to make the Conservation District legislative priority."

Senate Bill 1020 designates conservation districts as the primary local government unit responsible for the conservation of natural resources in the Commonwealth. It specifically states that districts are responsible for implementing programs, projects and a quantify, prevent and control non-point sources of pollution.

An important provision incorporated into Senate Bill 1020 delineates the roles and responsibilities of the Department of Agriculture the Department of Environmental Protection in assisting the State Conservation Commission to fulfill its duties. The goal is to improved system facilitating cooperation and coordination between the agencies to eliminate overlapping functions. A single point of contact will be established for the support, funding, administration and oversight of conservation districts.

(PA Environment Digest – 7/13/07)

DEP PROPOSES TO MODIFY LIST OF CONSTITUENTS FOR FUEL RELEASE INVESTIGATIONS

DEP in August proposed substantive revisions proposed to Pennsylvania's Land Recycling Program Technical Guidance Manual (TGM) – Section IV General Guidance include the addition to several regulated substances to the "short list" in Table IV-9 for several petroleum products and mineral insulating oils containing PCBs. It is only these regulated substances or "chemical of concern" identified in the "short list" that need to be tested for to demonstrate attainment under any of the Act 2 standards when there is a release of these petroleum products, uncontaminated by other sources. The addition of new regulated substances to the short list will result in more extensive remediation for certain petroleum products.

DEP IS PROPOSING THE FOLLOWING CHANGES TO THE PETROLEUM SHORT LIST

* Add both 1,3,4-trimethylbenzene and 1,3,5-trimethylbenzene to the leaded gasoline, aviation gasoline and jet fuel category; the unleaded gasoline category; the kerosene and fuel oil No.1 category; the diesel fuel and fuel oil No.2 category; and the mineral insulating oil category.

* Add MTBE to the kerosene and fuel oil No.1 category; and the diesel fuel and fuel oil No.2 category.

The Department is proposing add the following language to the TGM to facilitate a smooth transition to using the new short list:

* "For those sites in the Corrective Action Process or for which a Notice of Intent to Remediate has been filed prior to the date a revised list becomes effective and for which site characterization is substantially underway, attainment demonstration will be made using the old list of substances. Sites which commence investigations to characterize or verify releases after the date the new list becomes effective, or that are in the early phases of site characterization, whether under the Act 2 regulations or the Storage Tank Corrective Action Process, will use the new list for characterization and attainment demonstration purposes."

❖ DEP is not proposing any revisions to the general section relating to the "Short List of Petroleum Products"; TGM Section I.D.4, page I-10.

❖ The complete text of the proposed revisions and the list is available on the DEP website at the following web address: www.depweb.state.pa.us/dep/site/default.asp.

Click on "Public Participation", then "Final Guidance", then within the DEP eLibrary click on "Technical Guidance Draft Documents" then select "Land Recycling Program Technical Guidance Manual". The Petroleum Short List is included in the Land Recycling Program Technical Guidance Manual (TGM) as Table IV-9, page IV-94. The associated transition language is added in TGM Section IV.E.3, page IV-94. This is often a slow download from the eLibrary. The substance of the proposed revisions is the same as outlined above.

(DEP – 8/14/07)

COCA-COLA SETS GOAL TO RECYCLE OR REUSE 100 PERCENT OF ITS PLASTIC BOTTLES IN THE U.S.

Coca-Cola has announced it is investing more than $60 million to build the world's largest plastic-bottle-to-bottle recycling plant and support recycling in the U.S. These investments are part of a comprehensive goal to recycle or reuse 100 percent of the company's PET (polyethylene terephthalate) plastic bottles in the U.S. In addition, the company announced it will expand its relationship with Philadelphia's RecycleBank in an effort to boost consumer recycling rates.

(DEP Update – 9/6/07)

PENNSYLVANIA TO HOST LARGEST EAST COAST SOLAR POWER PLANT

A new solar energy power station is being built in southeastern Pennsylvania that will be the fourth-largest facility of its kind in the country and the largest east of Arizona when operations begin next April.

Plans call for more than 16,500 solar panels to be installed on 16.5 acres, adjacent to Waste Management's GROWS Landfill, in Falls Township, about 30 miles north of Philadelphia.

Upon completion, the plant will produce approximately 3,700 megawatt hours of power, enough to meet the annual energy requirements of 300-350 homes. At this output, emission levels of carbon dioxide and sulfur dioxide that directly contribute to pollution and acid rain will be reduced by the equivalent benefit of planting 33 acres of trees every year.

Speaking in September at the project site, Governor Ed Rendell announced that Exelon Generation Company has signed a 20 year power purchase agreement for the energy produced at the solar plant with EPURON, a subsidiary of the world's largest solar integration company Conergy AG.

EPURON GmbH, headquartered in Hamburg, Germany, is a project development and structured finance company in the renewable energy sector. With new offices in Philadelphia, EPURON growing the U.S. solar energy market along with its sister company SunTechnics, Conergy's engineering and installation arm.

(ENS – 9/4/07)

PENNSYLVANIA COUNTY FIRST TO POWER ALL BUILDINGS WITH WIND

Montgomery County in Pennsylvania became the first 100 percent wind powered county in the United States. Montgomery County, the utility PECO and Community Energy officials announced a 29 million kilowatt hour wind energy purchase that will power all county facilities. Equal to the electric consumption of 2,700 typical homes, the purchase ranks among the top 10 largest green power commitments by a U.S. governmental body.

Commissioner James Matthews said, "Montgomery County continues to tackle the very serious threat of climate change. Eliminating the County's greenhouse gas emissions form our electricity use sets a positive example that not only benefits our residents, but serves as a blueprint for other counties and towns to follow."

This commitment dovetails with the efforts of the Greenhouse Gas Reduction Task Force, which the county commissioners create earlier this year and charged with finding ways to reduce greenhouse gas emissions, increase energy efficiency and energy independence in Montgomery County.

The purchase of 29 million kilowatt hours

PA UPDATES *(Continued)*

of wind powered electricity, equal to the output of more than seven modern 380 foot tall wind turbines, is estimated to have the same environmental benefit as planting more than 16,000 acres of trees or removing 3,700 cars from the roadways.

Five percent of the wind purchase will be provided by PECO Wind. PECO is an electric and natural gas utility subsidiary of Exelon Corporation.

(ENS – 9/28/07)

PENNSYLVANIA SUPERFUND CLEANUP TO COST $22 MILLION

The Justice Department and Environmental Protection Agency, EPA, announced a settlement that will ensure the expedited cleanup hazardous chemicals in the soil and groundwater of the Foote Mineral Superfund Site, in Chester County, PA.

The settlement defendant, Frazer Exton Development, which has expanded about $7 million on cleanup actions already, will pay approximately $15 million to complete cleanup work of the site. In addition, Frazer Exton has agreed to reimburse the EPA for a portion of the cleanup costs incurred for response actions at the site.

Per the terms of the agreement, Frazer Exton will submit a work plan for the design of the remedial action. The remedial plan will include excavating and removing contaminated soils and other waste materials, long-term monitoring of groundwater to determine if the source control measures are effective in reducing contaminant concentrations, and implementing institutional controls to prevent residential use of impacted groundwater and preserve the integrity of the remedy.

The plan requires the approval of the EPA and allows Pennsylvania an opportunity for review and comment before the plan is implemented.

The site in East Whiteland Township, Chester County, is a 79 acre property formerly owned by the Foote Mineral Company. The property was the location of Foote Mineral's Frazer Facility, which produced lithium chemicals and processed a variety of ores. As a result of the activities conducted on the site, the groundwater beneath the site is contaminated with boron, lithium, chromium, bromate, and organic chemicals, including carcinogens benzene and tetrachloroethylene. The soils are contaminated with petroleum hydrocarbons and hazardous wastes from the processing of ores as well as with low-level radiation believed to be residual from mineral ores. The Foote Mineral Facility was closed in 1991 and buildings were demolished. The Frazer Exton acquired the property in 1998, for the purpose of residential development, with knowledge of the contamination and with the agreement to assume the liabilities associated with cleanup of the site.

(ENS – 6/29/07)

TECHNOLOGY UPDATES

DO MOLD, DAMPNESS CAUSE ADVERSE HEALTH EFFECTS? CONSUMERS DROP $3.5B YEARLY ON ASTHMA ATTRIBUTABLE TO DAMPNESS

The widely cited and oft-misinterpreted Institute of Medicine's May 2004 report "Damp Indoor Spaces and Health" found that while "excessive indoor dampness is a public-health problem," it did not conclude there exists a causal link that translates dampness into even the simplest of human health effects, much less the wide variety of symptoms claimed in a multitude of mold lawsuits over the last several years.

The report's committee concluded merely that evidence suggests an association, a concept that means the two merely exist but does not guarantee one causes the other.

A new study published in last month's edition of the journal Indoor Air results in the same logical conclusion. Specifically, wherever dampness existed in buildings in the analysis, the risk of a variety of respiratory and asthma-related health outcomes increased by as much as half.

While the latest research still falls short of concluding that dampness and mold have a causal relationship with asthma-related and respiratory health effects, the carefully constructed language about this relationship is closer toward establishing a cause. A separate examination finds a national annual cost of $3.5 billion on asthma cases said to be "attributable to dampness and mold exposure in the home."

Both sets of research were conducted by staff of the U.S. Department of Energy's Lawrence Berkeley National Laboratory, including William J. Fisk, who had also been one of nine members of the committee collaborating on the 2004 Institute of Medicine report. That report, a review of the existing literature on indoor dampness and the health effects associated with it, fulfilled a 2001 request by the Centers for Disease Control and Prevention.

Fisk, who is currently acting director for the lab's Environmental Energy Technologies Division, is quoted in a May 24 laboratory press release: "Our analysis does not prove that dampness and mold cause these health effects. However, the consistent and relatively strong associations of dampness with adverse health effects strongly suggest causation by dampness-related [pollutant] exposures."

The press release announces the availability of this analysis and the other Fisk-coauthored study, both of which were published in the June issue of Indoor Air.

(By Steve Sauer – Indoor Air Connections – 7/07)

POLLUTION CAUSES 40 PERCENT OF DEATHS

David Pimentel, Cornell professor of ecology and agricultural sciences, and a team of Cornell graduates students examined data from more than 120 published papers on the effects of population growth, malnutrition, and various kinds of environmental degradation on human diseases. (Their report is published in the journal Human Ecology to be published in the December print issue.)

About 40 percent of deaths worldwide are caused by water, air, and soil pollution, concludes the Cornell researcher. Such environmental degradation coupled with the growth in world population are major cause behind the rapid increase in human diseases that the World Health Organization has recently reported. Both factors contribute to the malnourishment and disease susceptibility of 3.7 billion people, he says.

"We have serious environmental resource problems of water, land and energy, and these are now coming to bear on food production, malnutrition, and the incidence of diseases," said Pimentel.

Of the world population of about 6.5 billion, 57 percent is malnourished, compared with 20 percent of a world population of 2.5 billion in 1950, said Pimentel. Malnutrition is not only the direct cause of 6 million children's deaths each year but also makes millions of people much more susceptible to such killers as acute respiratory infections, malaria, and a host of other life-threatening diseases, according to the research.

Among the study's other main points:

❖ Nearly half the world's people are crowded into urban areas, often without adequate sanitation, and are exposed to epidemics of such diseases as measles and flu.

❖ With 1.2 billion people lacking clean water, waterborne infections account for 80% of all infections diseases. Increased water pollution creates breeding grounds for malaria-carrying mosquitoes, killing 1.2 million to 2.7 million people a year, and air pollution kills about 3 million people a year. Unsanitary living conditions account for more than 5 million deaths each year, of which more than half are children.

❖ Air pollution from smoke and various chemicals kills 3 million people a year. In the United States alone about 3 million tons of toxic chemicals are released into the environment – contributing to cancer, birth defects, immune system defects and many other serious health problems.

❖ Soil is contaminated by many chemicals and pathogens, which are passed on to humans through direct contact or via food and water. Increased soil erosion worldwide not only results in more soil being blown but spreading of disease microbes and various toxins.

At the same time, more microbes are becoming increasingly drug-resistant. And global warming, together with changes in biological diversity, influence parasite evolution and the ability of exotic species to invade new areas. As a result, such diseases as tuberculosis and influenza are reemerging as major threats, while new threats – including West Nile virus and Lyme disease have developed.

"A growing number of people lack basic needs, like pure water and ample food. They become more susceptible to diseases driven by malnourishment, and air, water, and soil pollutants," Pimentel concludes.

(Env. Tip of the Week – 8/20/07)

TECHNOLOGY UPDATES

DIESEL EXHAUST + CHOLESTEROL = CARDIOVASCULAR DISEASE

Exposure to a combination of diesel exhaust and high blood cholesterol increases the risk for heart attack and stroke far more than exposure to either factor alone, new research reveals. The results indicate that controlling air pollution may prove to be a powerful tool for preventing cardiovascular disease.

Published in a July edition of the online journal "Genome Biology," the study is the first to explain how fine particles in air pollution work with artery-clogging fats to switch on the genes that cause blood vessel inflammation and lead to hardening of the arteries and cardiovascular disease.

"When you add one plus one, it normally totals two," said principal investigator Dr. André Nel, chief of nanomedicine at the David Geffen School of Medicine at UCLA and a researcher at UCLA's California NanoSystems Institute.

"But we found that adding diesel particles to cholesterol fats equals three. Their combination creates a dangerous synergy that wreaks cardiovascular havoc far beyond what's caused by the diesel or cholesterol alone," he said.

The researchers investigated the interaction between diesel exhaust particles and the fatty acids found in low-density lipoprotein, LDL, cholesterol - the "bad" type of cholesterol that leads to artery blockage.

The team was interested in how oxidation, cell and tissue damage resulting from exposure to molecules known as free radicals, contributes to inflammation and artery disease.

Free radicals enter the body through small particles present in polluted air and are also byproducts of normal processes, such as the metabolic conversion of food into energy.

"Diesel particles are coated in chemicals containing free radicals, and the fatty acids in LDL cholesterol generate free radicals during metabolism in the cells," said co-author Ke Wei Gong, a UCLA cardiology researcher. "We wanted to measure what happens when these two sources of oxidation come into contact."

The scientists combined the pollutants and oxidized fats and cultured them with cells from the inner lining of human blood vessels. A few hours later, the team extracted DNA from the cells for genetic analysis.

"We saw that the diesel particles and oxidized fats had worked in tandem to activate the genes that promote cellular inflammation — a major risk factor for atherosclerosis," said Dr. Jesus Araujo, UCLA assistant professor of medicine and director of environmental cardiology at the Geffen School of Medicine.

(ENS – 7/26/07)

TECHNOLOGY UPDATES *(Continued)*

NEW MATERIAL SPONGES UP POLLUTANTS, LEAVING WATER CLEAN

A unique type of porous material that can cleanse contaminated water and potentially purify hydrogen for use in fuel cells has been developed by scientists at the U.S. Department of Energy's Argonne National Laboratory.

Porous semiconducting aerogels were discovered by Argonne materials scientists Peter Chupas and Mercouri Kanatzidis, along with colleagues at Northwestern and Michigan State universities.

When the researchers submerged a speck of the aerogel in a solution of mercury-contaminated water they found that the gel removed more than 99.99 percent of the heavy metal.

The researchers believe that these gels can be used not only for environmental cleanup but also to remove impurities from hydrogen gas that could damage the catalysts in hydrogen fuel cells.

"When people talk about the hydrogen economy, one of the big questions they're asking is 'Can you make hydrogen pure enough that it doesn't poison the catalyst?'" Chupas said. "While there's been a big push for hydrogen storage and a big push to make fuel cells, there has not been nearly as big a push to find out where the clean hydrogen to feed all that will come from."

The aerogels act as a kind of sieve or selectively permeable membrane. Their unique chemical and physical structure will allow researchers to "tune" their pore sizes or composition in order to separate particular poisons from the hydrogen stream.

The research was presented in a paper, entitled "Porous semiconducting gels and aerogels from chalcogenide clusters," appeared in the July 27 issue of the journal "Science."

The initial research into porous semiconducting surfactants was supported by a grant from the National Science Foundation.

(ENS – 7/30/07)

ELECTRICAL FIELDS GENERATE HEALTH PROBLEMS

Electrical fields generated by everyday electrical equipment such as computers, and excess static electricity created by many modern materials, could be bad for your health, according to new research published by scientists at the Imperial College London. The study found such risks are far higher than previously thought, but simple actions can be taken in home, office and hospital to help reduce them.

The study, published in the August issue of the journal "Atmospheric Environment," indicates that prolonged exposure to the electrical fields generated in everyday indoor environments may cause increased risk of respiratory diseases and infection from small airborne particles such as allergens, bacteria and viruses.

Keith Jamieson of Imperial's Centre for Environmental Policy, lead author of the paper, says, "Many of the factors that can cause high electric fields and increased deposition and contamination are often found in hospital ward environments and in buildings where incidents of sick building syndrome are noted.

Electrical fields also have been shown by the authors to "significantly reduce" localized concentrations of charged molecular oxygen, a type of small air ion, that enhances biological functioning and kills harmful microbes.

Over 90 percent of airborne particles are in the size range which is affected by these electrical fields - less than one micron in size, 80 times smaller than a human hair.

While they can remain airborne almost indefinitely, the deposit of these tiny particles in people's lungs and on their skin can be greatly increased by electric field effects, particularly when they are close to oppositely charged surfaces, the study found.

The deposit of these particles in the lungs can be increased as a result of the electrostatic charge they hold. This causes "mirror" charges of opposite polarity to be induced on the neutral surface of the respiratory tract, the scientists said.

Electric field levels can also vary with the humidity levels of indoor air. Levels below 20-30 percent humidity cause marked increases in the level of electrical fields that can be generated, increasing incidents of particle deposition in people's lungs and on their skin, resulting in infections.

Temporary incidents of excess charge, which occur through frictional charging of materials - such as when a hospital worker makes up a patient's bed - can further increase likelihood of contamination

Increased deposition of these particles increases the toxic load that the body has to deal with, raising the risk of contamination, bacterial infection and incidence of conditions such as asthma. Surface contamination can prove harder to remove, as particles' deposition speeds are increased under high fields, making them stick harder to the surfaces they land on.

But Jamieson says there are a number of simple actions to take at work and at home that can help reduce the toxic load our bodies have to deal with and the risk of illness and infection being transmitted in this way. "In the case of electrical equipment, particularly laptops, ensuring they are earthed [grounded] can often greatly reduce fields," he said.

"In terms of the electrostatic charge generated by people themselves," he advises, "careful selection of materials and humidity levels can significantly reduce problems as can balanced bipolar air ionization."

"Trying to avoid spending time in areas where high fields are created, and unplugging electrical equipment when not in use, are also good options."

(ENS – 7/31/07)

CHESAPEAKE BAY DEVELOPMENT OVERWHELMS WATERSHED RESTORATION EFFORTS

New development around the Chesapeake Bay is increasing the runoff of excess nutrients and sediment at rates faster than restoration efforts are reducing them, a new report by the U.S. EPA Office of Inspector General has found. Developed lands contribute less than one-third of the loads of these contaminants entering the Bay but the report says they would require about two-thirds of the overall estimated restoration costs.

As a result, the EPA and its Chesapeake Bay watershed partners will not meet load reduction goals for developed lands by 2010 as established in the Chesapeake 2000 Agreement, according to the Office of Inspector General, OIG.

This review, released in September, is one of several conducted by the OIG in response to a congressional request. "We sought to determine how well the U.S. Environmental Protection Agency is assisting its Chesapeake Bay partners in restoring the Bay," said the Inspector General, who audits EPA's performance.

Over 64,000 square miles of land drain to the Chesapeake Bay. Population in the watershed exceeds 16 million and is projected to surpass 19 million before 2030.

Excessive loads of nutrients and sediments have been identified as primary causes of Bay degradation. The OIG said additional challenges impeding progress include lack of up-to-date information and limited funding as well as ineffective use of regulatory programs to achieve reductions.

(ENS – 9/12/07)

NASA: GLOBAL WARMING WILL BRING MORE SEVERE STORMS

The most violent severe storms and tornadoes may become more common as Earth's climate warms, say scientists with the National Aeronautics and Space Administration, NASA, using a new climate model. The scientists predict that in a warmer climate, stronger and more severe storms can be expected, but with fewer storms overall.

Previous climate model studies have shown that heavy rainstorms will be more common in a warmer climate, but few global models have attempted to simulate the strength of updrafts in these storms

The model developed at NASA's Goddard Institute for Space Studies in New York by researchers Tony Del Genio, Mao-Sung Yao, and Jeff Jonas is the first to successfully simulate the observed difference in strength between land and ocean storms.

It is the first to estimate how the strength will change in a warming climate, including "severe thunderstorms" that also occur with significant wind shear and produce damaging winds at the ground.

This information can be derived from the temperatures and humidities predicted by a climate computer model, according to the new study published on August 17 in the American Geophysical Union's journal "Geophysical Research Letters."

(ENS – 8/30/07)

LAKE SUPERIOR NEARED RECORD LOW LEVEL FOR AUGUST

Hydrologists with the National Oceanic and Atmospheric Administration, NOOA, indicate that Lake Superior is nearing a level that is lower than at any time in the month of August since recordkeeping began in 1860.

TECHNOLOGY UPDATES *(Continued)*

NOAA's Great Lakes Environmental Research Laboratory is able to forecast lake levels 12 months in advance using current hydrological conditions combined with NOAA's long-term climate outlooks. If continued, the trend could break past record lows for the months of September and October, the scientists said.

"Lake Superior is less than six centimeters higher than its August record low of 182.97 meters which was set in 1926, and it looks as though the water levels may continue to plunge," said Cynthia Sellinger, deputy director of NOAA's Great Lakes Environmental Research Laboratory in Ann Arbor.

"NOAA's lake level forecasts predict that there is a 15 to 20 percent probability that new monthly records will be set sometime this fall," Sellinger said.

On August 16, the level of Lake Superior was 183.028 meters.

Lake Superior's record low of 182.69 meters was set in April 1926, the same year the lake reached an averaged annual record low of 182.90 meters as a result of a major climatic event that led to the Dust Bowl of the 1930s.

Sellinger said that dramatic water level changes are generally caused by major climatic events. This includes the record high lake levels in the 1980s because of extreme rainfall, as well as the most recent drop in lake levels that were partially caused by the strong La Niña event in 1998 that affected the jet stream through the Great Lakes area and led to extreme droughts. The Great Lakes region has been experiencing warmer winters since 1997, and the combination of warmer air temperatures and less ice cover leads to increased evaporation rates during the winter. Also, with less snow pack, there is less spring runoff to replenish the lakes. The level of the water in Lake Superior has dropped two feet during the last decade.

(ENS – 8/20/07)

FOR COMPANIES, COMMITTED GREEN IS GOLD

More than two-thirds of American adults surveyed online say they consider a company's business practices when deciding what to buy.

At the same time, there is a substantial increase in the number of American workers who want their employers to support a social cause such as environmental conservation, a separate survey found.

"Cause marketing efforts have a proven impact on sales and remain effective ways for a company to express its heart and humanity," says Julia Hobbs Kivistik, executive vice president of Cause Branding, Cone, LLC, the company that commissioned both surveys.

The 2007 Cone Cause Evolution Survey presents the findings of an online poll conducted March 29 by Opinion Research Corporation of 1,066 adults 18 years of age and older.

Information about the causes Americans find important was gathered in an online survey on May 7 by Opinion Research Corporation of 1,097 adults 18 years of age and older. The margin of error in both surveys is plus or minus three percent.

(ENS – 7/18/07)

GROUND ZERO WORKERS REPORT 12 TIMES NORMAL ASTHMA RATE

Twelve times as many rescue and recovery workers developed asthma after responding to the World Trade Center disaster on September 11, 2001 than would be normally expected for the adult population, finds a new study released Monday by the New York City Department of Health and Mental Hygiene.

The data, drawn from the World Trade Center Health Registry, show that 3.6 percent of the 25,000 rescue and recovery workers enrolled in the Registry report developing asthma since they were exposed to dust and debris at Ground Zero.

"The dust from the World Trade Center collapse appears to have had significant respiratory health effects at least for people who worked at the site," said New York City Health Commissioner Dr. Thomas Frieden.

Workers who arrived on September 11, 2001, and worked more than 90 days reported the highest rate of new asthma - seven percent

Rescue and recovery workers were a diverse group that included firefighters, police officers, construction workers and volunteers, among others. The study found no significant differences among people of different occupations, but workers' locations did affect their risk.

Of those who were caught in the dust cloud, 4.9 percent reported developing asthma, and of those who worked on the debris pile, 4.5 percent reported developing the respiratory disease.

"These findings reflect the critical importance of getting appropriate respiratory protection to all workers as quickly as possible during a disaster, and making every effort to make sure workers wear them at all times," Dr. Frieden said.

Though respirator use increased as the cleanup progressed, many workers did not wear respiratory protection at the outset. Certain respirators can reduce exposure to hazardous dust when used correctly, but the survey could not distinguish among different types of masks or respirators, nor could it gauge correct usage.

Workers who wore them on September 11 and 12 reported newly-diagnosed asthma at lower rates than those who did not. The longer the period of not wearing masks or respirators, the greater the risk, the survey found.

Workers who went months without respiratory protection reported two to three times more asthma incidence than those who wore respirators from the outset. Though respirators were shown to be protective, all worker groups, including those who reported wearing masks, had elevated levels of newly reported asthma.

(ENS – 8/28/07)

GLACIERS AND ICE CAPS QUICKLY MELTING INTO THE SEAS

Sea level rise this century may be greater than previously thought, posing risks to hundreds of millions of people who live close to the world's oceans, concludes a new study of ice loss from glaciers and ice caps. The researchers say that in the near future, the giant Greenland and Antarctic ice sheets will contribute less to sea level rise than glaciers and ice caps.

Scientists with the University of Colorado-Boulder's Institute of Arctic and Alpine Research, INSTAAR, and the Russian Academy of Sciences conclude that glaciers and ice caps now contribute about 60 percent of the ice melting into the oceans and the rate has been accelerating over the past decade.

"One reason for this study is the widely held view that the Greenland and Antarctic ice sheets will be the principal causes of sea-level rise," says lead author Emeritus Professor Mark Meier, former INSTAAR director and CU-Boulder professor in geological sciences.

"But we show that it is the glaciers and ice caps, not the two large ice sheets, that will be the big players in sea rise for at least the next few generations, he says.

The accelerating contribution of glaciers and ice caps is due in part to rapid changes in the flow of tidewater glaciers that discharge icebergs directly into the ocean, says Anderson.

Many tidewater glaciers are undergoing rapid thinning, stretching and retreat, which causes them to speed up and deliver increased amounts of ice into the world's oceans, he says.

Water controls how rapidly glaciers slide along their beds, he explains. When a glacier with its "toe in the water" thins, a larger fraction of its weight is supported by water and it slides faster and calves more ice into the ocean at the glacier terminus.

"While this is a dynamic, complex process and does not seem to be a direct result of climate warming, it is likely that climate acts as a trigger to set off this dramatic response," he says.

The team summarized satellite, aircraft and ground-based data from glaciers, ice caps, the Greenland ice sheet, the West Antarctic ice sheet and the East Antarctic ice sheet to calculate present and future rates of ice loss for the study.

(ENS – 7/20/07)

LANDSCAPE ARCHITECTS' GREEN ROOF KEPT RUNOFF OUT OF DC SEWERS

In July 2006, The American Society of Landscape Architects, ASLA replaced the conventional roof on its downtown Washington, DC headquarters with a green roof, and in the process installed equipment to gather data on stormwater runoff, water quality, and temperature.

When the figures were tallied in May, the new green roof was found to have retained thousands of gallons of stormwater, reduced building energy costs by hundreds of dollars a month, and lowered outdoor air temperature.

An ASLA report released Thursday shows that between July 2006 and May 200, ASLA's green roof prevented 27,500 gallons of stormwater - nearly 75 percent of all precipitation on the roof - from flowing into the Capital District's overburdened sewer and stormwater system.

Except during repeated heavy rains, the roof only created runoff during rainfalls that exceeded one inch. The water runoff itself contained fewer pollutants than typical water runoff, ASLA says.

"Because landscape architects are leading in the design of green roofs across the country, it was important for us to build a demonstration project and measure the impact green roofs have

TECHNOLOGY UPDATES *(Continued)*

on their surrounding communities," said ASLA Executive Vice President and CEO Nancy Somerville. "The findings show that our green roof delivered significant economic and environmental benefits."

ASLA's green roof lowered air temperature by as much as 32 degrees in the summer when compared to a neighboring tarred roof, helping mitigate the urban heat island effect.

"Collectively, green roofs can save billions of dollars in urban infrastructure costs, which is why more and more cities are encouraging them through tax and other incentives," Somerville said.

The roof also reduced the building's energy costs, especially in the winter. Engineering analysis showed that the green roof's extra insulation lowered energy use in the winter by 10 percent and has a potential to lower use of energy two to three percent in the summer.

Because of the small amount of water-retaining green space in urban areas, ASLA says, stormwater systems can be overwhelmed during periods of heavy rains. In the many cities that have combined sewer systems, the result is the release of untreated sewage and stormwater into rivers and lakes. Green roofs, which can retain up to 75 percent of a one-inch rainfall, alleviate pressure on city's overburdened sewer systems caused by stormwater.

The full briefing report, the comprehensive water monitoring report and detailed planting information is online at:

" http://www.asla.org/greenroof.

(ENS – 9/21/07)

ASIAN BROWN CLOUDS INTENSIFY GLOBAL WARMING

Brown clouds of pollution over South Asia have multiplied solar heating of the lower atmosphere by 50 percent, finds new research by scientists at Scripps Institution of Oceanography at the University of California-San Diego.

The combined heating effect of greenhouse gases and the brown clouds is necessary and sufficient to account for the retreat of Himalayan glaciers observed over the past 50 years, the researchers conclude.

Led by Scripps atmospheric chemistry Professor Veerabhadran Ramanathan, the team describes their findings in a paper to be published in the August 2 edition of the journal "Nature."

Not entirely made up of water vapor like regular clouds, brown clouds contain soot, sulfates, nitrates, hundreds of organic compounds, and fly ash from urban, industrial and agricultural sources.

"The conventional thinking is that brown clouds have masked as much as 50 percent of the global warming by greenhouse gases through the so-called global dimming," said Dr. Ramanathan. While this is true globally," he said, "this study reveals that over southern and eastern Asia, the soot particles in the brown clouds are intensifying the atmospheric warming trend caused by greenhouse gases by as much as 50 percent."

The Himalayan glaciers feed the major Asian rivers - the Yangtze, the Ganges and the Indus - that supply water to billions of people in China, India and across southeast Asia.

(ENS – 8/8/07)

FEDS RAISE THE BAR FOR ENERGY STAR REFRIGERATORS

Refrigerators carrying the federal government's Energy Star® energy efficiency label are going to have to be more efficient in the future.

The U.S. Department of Energy, DOE, announced Friday that in order to qualify for the label now, full-size refrigerators must be a minimum of 20 percent more efficient than current standards, an increase from the existing 15 percent minimum.

The new criteria, drafted with input from stakeholders and two rounds of public comments, will go into effect on April 28, 2008. Freezers and compact refrigerators are not included in these new criteria.

"More stringent Energy Star criteria for refrigerators means more consumers can make smart energy choices and help further the Nation's goal of increasing efficiency, resulting in real and significant energy savings," said DOE Assistant Secretary for Energy Efficiency and Renewable Energy Alexander Karsner.

The DOE projects that 2.2 million Energy Star qualified refrigerators will be sold in the first year after the criteria take effect next April.

As a result, the DOE estimates families will save up to $23.5 million annually on their electric bills, and over 230 million kilowatt hours of energy - enough to light every household in Washington, DC, for more than five months.

Current Energy Star qualified refrigerators use 65 percent less energy than refrigerator models in 1980. DOE estimates that any increase in product price for an Energy Star qualified refrigerator would be offset within three to five years from the time of purchase by reduced electricity bills.

(ENS – 8/8/07)

SCIENTISTS CALL FOR GLOBAL BAN ON LEAD-BASED PAINTS

Consumer paints sold in Nigeria contain dangerously high levels of lead, a multinational team of environmental and occupational health researchers has found, in the first report on consumer paint lead levels in Africa. The scientists are calling for a global ban against lead-based paint to protect people in all countries from the brain and nervous system damage that results from lead exposure.

Increased globalization and outsourcing of manufacturing has increased the likelihood that painted products with unacceptably high levels of lead are being traded across borders - between China and Africa as well as into regulated countries like the United States.

"Nigeria's recent economic recovery may lead to increased activity in the building industry and Nigeria, like other African countries, is increasing trade with Asia, particularly in China," explains Eugenious Adebamowo of the University of Ibadan's Department of Civil Engineering, lead author of the study.

"It's important that international regulations be in place to supplement local efforts to ensure that paints have lower than recommended lead levels, with the ultimate goal of eventually eliminating all lead from paint," she says.

Researchers at the University of Cincinnati in Ohio and University of Ibadan in Nigeria report these findings in the September online edition of the journal "Science of the Total Environment," and will be published in the December print issue of the journal.

Lead is a malleable metal previously used to improve the durability and color luster of paint applied in homes and on industrial structures such as bridges.

Now linked by scientists to impaired intellectual and physical growth in children, lead is also found in some commonly imported consumer products, including candy, folk and traditional medications, ceramic dinnerware and metallic and wooden toys and trinkets.

Researchers say exposure to environmental health hazards is a continuing concern in developing countries, where the United Nations has identified lead as a primary problem.

Previous studies conducted by Jos University Teaching Hospital in Nigeria and several international collaborators have shown that 70 percent of children, aged six to 35 months, had elevated blood-lead levels and that flaking house paint was a primary determinant of this exposure.

For this study, researchers analyzed lead levels in five colors of paint from each of five brands that are marketed and sold in Ibadan, a city of more than two million people in southwestern Nigeria.

Each paint sample was applied in a single layer to a wood block, left to dry and then removed and analyzed in University of Cincinnati laboratories for lead content. The tests showed that 96 percent of the consumer paints available in Nigeria contained higher than the recommended levels of lead. Bright-colored paints – particularly yellow, red, and green – contained the highest levels.

Lead levels in yellow paint were 10 times higher than levels in white paint, red paint lead levels were six times higher and green paint lead levels were three times higher. "The extent of domestic lead exposure, and its resulting health hazards has been understudied in developing countries, though its importance in cognitive dysfunction related to early exposure is well established in countries such as the United States," says Scott Clark, PhD, professor of environmental health at UC and study collaborator.

(ENS – 9/27/07)

FEDERAL REGULATORY UPDATES

NEW PUBLICATIONS

Remediation Case Studies and Technology Assessment Reports Fact Sheet: June 2007 (EPA 542-F-07-002). This fact sheet produced by the FRTR describes the status of cost and performance activities, including recent additions to completed case studies and reports. A total of 756 reports are now available. These reports represent a wide spectrum of technology deployment in the field, ranging from pilot-scale demonstrations to full-scale applications at single and multiple sites (June 2007, 6 pages). View or download at:
http://clu-in.org/techpubs.htm. For hard copies, contact (800) 490-9198 or fax to (301) 604-3408.

Ecological Revitalization and Attractive Nuisance Issues (EPA 542-F-06-003). This fact sheet is the third and final in a series of fact sheets related to ecological revitalization on Superfund sites. Superfund sites are being cleaned up and restored while integrating natural features such as wetlands, meadows, streams, and ponds to provide habitat for terrestrial and aquatic plants and animals, and for low-impact or passive recreation, such as hiking and bird watching. The potential exposure of wildlife can be a concern when waste or contaminants remain on a site following cleanup (i.e., attractive nuisance), but it need not prevent the ecological revitalization of that site. This fact sheet discusses how to identify, assess, and manage potential attractive nuisance issues during ecological revitalization of Superfund sites and presents case studies that illustrate a variety of attractive nuisance issues and how they were managed (June 2007, 12 pages). View or download at http://clu-in.org/techpubs.htm.

A Framework for Assessing the Sustainability of Monitored Natural Attenuation: U.S. Geological Survey Circular 1303. The U.S. Geological Survey, in cooperation with the Strategic Environmental Research and Development Program (SERDP) and Virginia Tech University, has developed a framework for assessing the long-term sustainability of monitored natural attenuation at hazardous waste cleanup sites. The framework consists of methods for assessing the balance between the delivery of contaminants to the environment and their natural attenuation. This methodology, recently published as U.S. Geological Survey Circular 1303, provides environmental planners and managers with a quantitative plan for using monitored natural attenuation as the solution for cleaning up hazardous waste sites (July 2007, 48 pages). View or download at :
http://pubs.usgs.gov/circ/circ1303/.

Estimation of Relative Bioavailability of Lead in Soil and Soil-like Materials Using In Vivo and In Vitro Methods (OSWER 9285.7-77). Reliable analysis of the potential hazard to children from ingestion of lead in environmental media depends on accurate information on a number of key parameters, including the rate and extent of lead absorption from each medium. Bioavailability of lead in a particular medium may be expressed either in absolute terms (absolute bioavailability, ABA) or in relative terms (relative bioavailability, RBA). This report summarizes the results of a series of studies performed by scientists in U.S. EPA Region 8 to measure the RBA of lead in a variety of soil and soil-like test materials using both in vivo and in vitro techniques (May 2007, 386 pages). View or download at:
www.epa.gov/superfund/bioavailability/lead_tsdpdf.

(TechDirect – 8/1/07)

PENDING VAPOR POLICY COULD SET CONSISTENT DOD APPROACH FOR CLEANUPS

The Defense Department (DOD) is developing a Pentagon-wide policy for cleaning up toxic vapors that will provide the military with a consistent approach for addressing the issue but may also intensify conflicts with regulators over when and how to conduct controversial vapor cleanups.

Alex Beehler, DOD's number two environmental official, told a House Armed Services subcommittee hearing July 12 that DOD will issue new guidance to the armed forces in the coming months on how to deal with the increasingly common problem of toxic vapor intrusion. "DOD is going to put out a guidance in the very near future on how to handle vapor intrusion," Beehler told the hearing, adding that the document could be ready within six months.

DOD officials say the guidelines would enable DOD to present a united front when dealing with EPA, while EPA and state regulatory sources say the new guidelines will help – but only if they do not compromise DOD compliance with state and federal cleanup requirements.

Military officials are developing the policy even as EPA officials are working to develop their own approach for addressing vapor intrusion, which an EPA source says could be unveiled in 2008. EPA and Capitol Hill sources say the agency is facing congressional pressure to accelerate its efforts to release guidance on vapor intrusion following questions from Rep. Maurice Hinchey (D-NY), a member of the House Appropriations Committee. The lawmaker is grappling with vapor intrusion issues at sites in his upstate New York district stemming from trichloroethylene (TCE) contamination, Hinchey's spokesman says.

EPA officials earlier this year floated draft guidelines that would, for the first time, allow regulators to address vapor intrusion in some workplaces, a venue that is usually regulated by the Occupational Safety & Health Administration (OSHA) (Superfund Report, April 23, p3).

The EPA source says the agency is also working on technical documents that will draw on ideas contained in a step-by-step guide to dealing with vapor intrusion published by the Interstate Technology & Regulatory Council (ITRC), a group of state regulators. "We are actively considering reference to the ITRC guidance document – to use it as a reference, a guide," explains the source, who adds that EPA's last effort at draft guidance was in 2002, and "the science has moved on since then."

(Superfund Report – July 30, 2007)

2008 EMERGENCY RESPONSE GUIDEBOOK; ELECTRONIC VERSION WILL BE AVAILABLE

Two federal agencies joined forces to give fire fighters and other emergency responders instant access to information that will help them – in the first critical moments of an incident – determine the best way to safely contain hazardous materials spills and battle chemical fires.

Emergency responders will for the first time have electronic access through laptops and personal digital assistants (PDAs) to the 2008 Emergency Response Guidebook (ERG) under the new effort between the U.S. Departments of Transportation (DOT) and Health and Human Services (HHS). The guidebook is the go-to reference for first responders to help them quickly identify hazardous material classifications, determine the best response, and protect themselves and the general public immediately after an incident.

"This new digital tool will give our police, fire fighters, and other emergency responders first on the scene the information they need to make the rapid-fire decisions necessary to protect the public and themselves," said Ted Willke, PHMSA associate administrator for Hazardous Materials Safety.

FEDERAL REGULATORY UPDATES

FEDERAL REGULATORY UPDATES *(Continued)*

The new electronic guidebook is being made possible by a new agreement signed between DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) and the HHS's National Library of Medicine.

The library developed special software to give emergency responders access to the guidebook through PDAs as well as Windows-based laptops and desktops. The software application, called the Wireless Information System for Emergency Responders (WISER), will be available later this year.

The 2004 version of the ERG (and eventually the 2008 version) can be found at: http://hazmat.dot.gov/pubs/erg/gydebook.htm/. Although not available yet, the printed version of the 2008 ERG will be available at this link (where the 2004 version is still available).

(Environmental Resource Center – 7/2/07)

DOT PROPOSES TO REVISE EMERGENCY PHONE NUMBER REQUIREMENTS FOR SHIPPING PAPERS

The DOT is proposing to amend the Hazardous Materials Regulations to clarify requirements governing emergency response information services provided by arrangement with hazardous materials offerors. In order to preserve the effectiveness of these arrangements for providing accurate and timely emergency response information, DOT's Pipeline and Hazardous Material Safety Administration is proposing to require that basic identify information (offeror name or contract number) be included in shipping papers. This information will enable the service provider to identify the shipper on whose behalf it is accepting responsibility for providing emergency response information in the event of a hazardous materials incident.

(Environmental Resource Center – 7/9/07)

EPA PROPOSES MEASURES TO ADDRESS DIRECT EMISSIONS OF FINE PARTICULATES

EPA is proposing options for calculating key program elements in implementing the Prevention of Significant Deterioration (PSD) program for fine particle pollution in areas that meet clean air standards. Fine particle pollution can aggravate heart and lung diseases and has been associated with premature death and a variety of serious health problems including heart attacks, chronic bronchitis, and asthma attacks.

When an industrial facility applies for a permit to emit a regulated pollutant in an area that meets clean air standards, the state regulatory agency and federal EPA must determine if emissions of that pollutant will harm air quality. The PSD program uses three key measures to make this determination: increments, significant impact level (SIL), and significant monitoring concentration (SMC). The proposal presents options for how to calculate each of these measures for PM2.5. EPA will accept comments on the proposal for 60 days after publication in the Federal Register.

(Environmental Resource Center – 9/17/07)

EPA PROPOSES NO FURTHER REDUCTIONS IN OIL REFINERY EMISSIONS

A recent analysis by the U.S. Environmental Protection Agency (EPA), on the risks from air toxics emitted from petroleum refineries found that the risks to human health and the environment are low enough that no further controls are warranted, the agency said.

The EPA analyzed the petroleum refinery emissions as part of a Clean Air Act requirement that the agency examine potential risks remaining after implementation of 1995 standards known as maximum achievable control technology, MACT, that require industrial facilities to reduce emissions of toxic air pollutants.

Based on the results of the analysis, EPA is proposing two options for controlling air toxics emissions from refineries.

The first option requires no additional emissions reductions because the risks are "acceptably low." As a second option, the EPA is proposing requiring additional emissions reductions for certain storage vessels and wastewater treatment units.

Under this alternative, the agency projects that refineries could reduce air toxics emissions by about 1,000 to 4,600 tons per year from 153 facilities. The agency estimates this alternative could cost up to $1.1 million or save up to $4 million nationwide each year by reducing product loss. EPA is seeking public comment on both options.

(Ens – 8/24/07)

INDUSTRY, ACTIVISTS WATCH ASBESTOS BRAKE LAWSUIT AS PRECEDENT

Industry defendants and advocates for plaintiffs in asbestos litigation are both looking to a Michigan Supreme Court's forthcoming ruling as a potential national precedent on whether courts should accept testimony from expert witnesses asserting that exposure to asbestos-containing brake parts can cause lung cancer, with both sides saying the case could affect the outcome of asbestos claims nationwide.

One plaintiffs' lawyer following the case says that a ruling in accepting industry's claims that the testimony should be disallowed would be the first of its kind in the country and says industry would likely cite such a ruling in other states where it is trying to fight off similar asbestos-related claims.

In contrast, a ruling favorable to the plaintiffs would be an important victory for asbestos victims' advocates around the country because the Michigan court is considered fairly conservative, the lawyer says.

The anticipated ruling follows EPA's inclusion of warnings about health hazards associated with repairing and replacing brake and clutch pads that may contain asbestos in a new guidance brochure designed to prevent auto mechanics' exposure to the carcinogen. EPA recently released the final guidance despite industry objections. Since 1972 EPA has sought to limit exposure to asbestos fibers on the grounds that they are carcinogenic.

At issue is the case Chapin v. DaimlerChrysler Corporation, et al., in which plaintiffs relied in part on the testimony of Dr. Richard Lemen in making their claim that the automaker has liability for cancer that they say was caused by brake linings containing asbestos. In his testimony, Lemen contended that auto workers can develop mesothelioma following exposure to asbestos-containing brakes. Michigan trial and appellate courts both accepted Lemen's testimony as an expert witness.

Auto companies are arguing that the lower court rulings erred in admitting Lemen's testimony and appealed to the Michigan Supreme Court to overturn the lower court's decision, but the higher court on June 22 issued a ruling denying the appeal. Auto companies have since filed a motion is now pending.

"Nationally, thousands of lawsuits are now pending against the automotive manufacturers involving claims of mesothelioma allegedly caused by automotive friction products," the companies say in their July 13 motion for reconsideration, adding that Leman "is named as an expert in hundreds of these cases."

(Superfund Report – 9/10/07)

SAB ENDORSES EPA VIEW THAT INORGANIC ARSENIC POSES CANCER RISK

EPA's Science Advisory Board (SAB) in significant new recommendations is supporting the agency's view that exposure to inorganic arsenic (iAs) poses cancer risks at any level above zero, a conclusion that will likely support EPA efforts to maintain and possibly strengthen future regulations for iAs in drink-

FEDERAL REGULATORY UPDATES *(Continued)*

ing water, as well as cleanup levels at hazardous waste sites, despite pressure to re-evaluate what industry argues is conflicting evidence on the risks.

The board also concludes that a threshold, or "safe," exposure level can be set in assessing the cancer risks of organic arsenic, a recommendation with implications for certain pesticides and other uses of the substance.

One important conclusion of the final report – which closely mirrors the major recommendations of a draft released in October – is its support for the findings of a controversial Taiwanese epidemiological study EPA used to back its 2001 decision to lower the arsenic drinking water maximum contaminant level (MCL) to 10 parts per billion (ppb). SAB also backs the draft report's recommendations, and EPA's preference, that iAs risks should be assessed using a so-called linear model, which assumes that the substance poses cancer risks to humans at any exposure level.

When SAB released its draft last year, observers commented that the findings would support tighter drinking water and hazardous waste site cleanup standards for iAs because of the draft's recommendation to assess the substance's risks using a linear model. At the time, a source who took part in the panel's scientific review said that EPA had presented convincing scientific arguments to the SAB panel conducting the review for maintaining the scientific basis of its arsenic health risk assessments and its 10 ppb drinking water standard.

Furthermore, the source said, the agency had offered enough evidence to argue for an even stricter drinking water MCL in the future. "The MCL is based not just on the risk but also on the technological ability to remove it from water," the source said. "You can nickel and dime the risk but the risk at 10 ppb is still very high. If you were letting the risk drive it, you'd be down to an MCL of 1 ppb."

The SAB recommendations could also support other regulatory decisions because they will influence the health risk assessments provided in the agency's Integrated Risk Information System, which EPA and state officials use in regulatory decision-making.

An EPA source says the pesticide and water offices are both reviewing the June 28 final report, Advisory on EPA's Assessments of Carcinogenic Effects of Organic and Inorganic Arsenic, and a response "has to be coordinated" after interoffice discussions. Organic arsenic is used in some pesticides, including cacodylic acid or DMAv, while iAs occurs naturally and is often present in drinking water systems in Western states.

In addition, the wood preservative chromated copper arsenate was used in treated wood products until it was phased out in December 2003, and EPA estimates that roughly 70 percent of homes nationwide still have arsenic treated wood decks and porches.

SAB recommends using a non-linear model for estimating the cancer risks of organic arsenic, which suggests there is an exposure threshold below which the substance does not pose a health risk, a recommendation also in line with the October draft. That finding could push the agency to allow re-registration of DMAv and several other pesticides containing the substance, which the SAB report notes are now being assessed.

In August 2006 EPA's Office of Pesticide Programs (OPP) had indicated that it would not re-register organic arsenical chemicals primarily used on golf courses and in cotton growing because of their potential to transform into the more toxic inorganic form of the metal in soil and find their way into drinking water supplies. The move drew strong criticism from industry because OPP's exposure limit of 0.02 ppb is 500 times stricter than the water office standard of 10 ppb. EPA now is reassessing some of those pesticides for re-registration, the report says.

The report highlights the uncertainties about organic arsenic risks. According to SAB, an "optimal basis for the assessment of DMAv exposure in humans" cannot be found in either rodent laboratory data on organic arsenicals or data from studies of human exposure to inorganic arsenic "because of differences between the metabolic profiles for inorganic arsenic and DMAv and because of interspecies differences in their metabolism." The report notes, however, that despite the uncertainties, "for now, the data from rodent exposures to DMAv appear to be the most reasonable approach for the DMAv assessment, though this approach has a significant degree of uncertainty."

Overall, the agency source says, it is unclear how EPA will respond to the report in the short term. The report is undergoing review but, because the review is incomplete, "I can't tell you we agree 100 percent [with the findings] or that our labs are doing everything" the report recommends, the source says. "Although I don't know about a schedule for following SAB's recommendations, our labs have their own schedules" for progress on research and development of new test methods in 2008 and 2009, the source adds.

The source also notes that some of the report's recommendations for further research are already being pursued, such as the development of a so-called biologically based dose-response model for organic arsenic. In EPA's charge questions to SAB, the agency had said such a model is "the preferred approach to estimating cancer risk, but there are insufficient data on [organic arsenic] to support development of such a model." SAB recommends pursuing such a model further and the agency is doing that, the source says.

(By Adam Sarvana-SUPERFUND REPORT – 7/16/07)

DOT BANS LITHIUM BATTERIES ON PASSENGER AIRCRAFT

Cargo shipments of certain types of lithium batteries will remain banned from passenger aircraft under a final rule: http://hazmat.dot.gov/regs/notices/rulemake.htm#72fr-44929 issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA).

The rule amends the Hazardous Materials Regulations by adopting a limited ban on primary, non-rechargeable lithium batteries – such as those found in cameras, laptop computers and mobile telephones – to reduce the risk of potential fire caused by electrical short circuit. This final rule also tightens standards for testing, handling, and packaging lithium batteries to reduce the likelihood of a lithium battery-related fire during shipment.

"Keeping shipments of metal lithium batteries off of passenger aircraft is a prudent step to help keep America's airlines the safest in the world," said PHMSA Chief Safety Officer and Assistant Administrator Stacey L. Gerard.

Lithium batteries are considered a hazardous material because they can overheat and ignite in certain conditions. Safety testing conducted by the Federal Aviation Administration found that current aircraft cargo fire suppression systems are not capable of suppressing a fire if a shipment of primary lithium batteries is ignited in flight. While the rule bans shipments of the batteries on passenger flights, it does not affect the ability of passengers to carry or use personal devices containing lithium batteries while aboard aircraft.

In addition to the rule, PHMSA is working with the Federal Aviation Administration, the National Transportation Safety Board, the Consumer Product Safety Commission, the battery and airline industries, airline employee organizations, testing laboratories, and the emergency response communities to increase public awareness about battery-related risks and development, and to promote improvements in industry standards and best practices.

(Env. Tip of the Week – 8/14/07)

FEDERAL REGULATORY UPDATES *(Continued)*

NEW DATA MAY ALLOW EPA TO LIMIT STRICT DEFAULT MODEL IN VAPOR GUIDE

EPA has developed a new database of toxic vapor samples that observers say will allow the agency to limit use of strict default assumptions from a 2002 draft guidance for assessing whether vapors stemming from hazardous waste sites require cleanup, which industry criticized as overly conservative.

An EPA source says the agency plans to release in the coming months technical documents that will move away from using a controversial model – known as the Johnson-Ettinger model – for identifying those hazardous waste sites most likely to suffer from vapor problems, toward site-specific solutions based upon improved data.

The technical documents will be released in a series, rather than all at once, the source says, and will be announced in the Federal Register. EPA will also avoid giving formal guidance, such as prescriptive instructions on when and how to use default values for screening sites in need of further testing, or other policy decisions. The documents will be devoid of "any such value judgments," says the source.

State regulators and industry sources differ over the significance of the move, but generally welcome a more site-specific approach, and a better data set. Better data could allow for more accurate modeled outcomes, which could be used to screen out sites that require more testing, sources say. It could also allow regulators to sidestep entirely default screening models, and instead rely on site-specific approaches.

Vapor intrusion results when chemical vapors emerge from polluted soil or groundwater and contaminate indoor air. The contamination can be caused by spilled oil and industrial chemicals and has become an emerging concern nationwide, with toxic vapors being found in residences, office buildings and industrial sites.

Regulators' relatively new focus on vapor exposure pathways has resulted in cleanups that were once considered completed being reassessed to address vapor intrusion concerns. But EPA has struggled to develop guidance on the issue, in part because of limited scientific data.

EPA Administrator Stephen Johnson revealed the agency's new approach in a written response to questions from Rep. Maurice Hinchey (D-NY), who sought answers from Johnson following a House Appropriations Committee hearing earlier this year. Hinchey, whose office released Johnson's response to Inside EPA July 26, is concerned with potential vapor intrusion at sites in his upstate New York district.

"We have been working on the underlying science and have made significant technical improvements, including the development of a national database of vapor intrusion observations that has changed the field from one dominated by predictive models to one that can be based on observed measurements," Johnson said.

Johnson told Hinchey that the database includes over 2,500 paired samples of environmental and indoor air concentrations to improve the understanding of the factors influencing vapor intrusion. The database "could be used to help regulators establish reasonable (evidence-based) screening levels. We are considering making this national database available to the states for their use," Johnson said.

If EPA moves forward with the new approach, it would likely address concerns from industry officials, who criticized the 2002 document for relying on the Johnson-Ettinger model's default assumptions.

(SUPERFUND REPORT – 8/13/07)

DRBC PROPOSES PERMANENT DESIGNATION TO PROTECT LOWER DELAWARE WATER QUALITY

Delaware River Basin Commission (DRBC) Executive Director Carol R. Collier in early October announced proposed regulatory changes to permanently designate the Lower Delaware and its drainage area as Significant Resource Waters under the commission's Special Protection Waters (SPW) program. This would include establishing numeric values for existing water quality in the 76-mile long stretch of river extending from the Delaware Water Gap National Recreation Area downstream to the head of tide at Trenton, NJ.

"If adopted, this rulemaking will protect the existing high water quality in the Lower Delaware River and expand the coverage of the commission's SPW anti-degradation regulations to encompass the entire 197-mile non-tidal Delaware River from Hancock, NY to Trenton," Collier said. "This clearly demonstrates the DRBC's long-term objective of keeping our clean water clean."

A public hearing will be held on Tuesday, December 4 at the DRBC's office building, located at 25 State Police Drive in West Trenton, NJ; the hearing will begin at 2:30 p.m. and continue until all those who wish to testify have the opportunity to do so. Those who wish to testify are encouraged to register in advance. Written public comments will be accepted through the close of business on Thursday, December 6 and may be submitted by email, fax, U.S. Mail, or overnight mail.

The Lower Delaware has been temporarily classified as Significant Resource Waters since January 2005, making it subject to all SPW regulations except those that stipulate the use of numeric values for existing water quality. The commissioners at their September 26, 2007 meeting approved an extension of this temporary designation until May 15, 2008 to allow adequate time to complete the proposed rulemaking and public comment process now underway.

The SPW program is designed to prevent degradation in streams and rivers considered to have exceptionally high scenic, recreational, ecological, and/or water supply values through stricter water quality standards and reporting requirements. The initial SPW regulations adopted in 1992 focused on controlling point (or end-of-pipe) sources of pollution to maintain existing high water quality. In 1994, the regulations were amended to add language dealing with the complex issue of non-point source pollutants that are found in runoff, especially after heavy rains.

(DEP – 10/7/07)

PRESIDENT UNVEILS U.S. PLAN TO CURB GLOBAL WARMING

In early October, President Bush announced his plans for reducing carbon emissions and other steps the administration is taking to curb global warming. At the "major economies meeting," the President indicated:

www.whitehouse.gov/news/releases/2007/09/20070928-1.html that a strong and transparent system is needed for measuring progress and that each nation should design its own separate strategy for making progress to achieve these goals.

(Env. Tip of the Week – 10/1/07)

NEW REPORT SETS TARGET FOR U.S. EMISSIONS CUTS

According to a study by the Union of Concerned Scientists (UCS) and scientists at Stanford University and Texas Tech University, the world needs to stabilize the concentration of heat-trapping gases in the atmosphere to no more than 450 parts per million in order to avoid the most severe effects of climate change. This limit aims to avoid exceeding a 2 degree Celsius increase in global average temperature above preindustrial levels (roughly equivalent to a 2 degree Fahrenheit rise above current temperatures).

Stabilizing gases above this level likely would lead to severe risks to natural systems and human health. Sustained warming of this magnitude could, for example, result in the extinction of many species and increase the threat of extensive melting of the Greenland and West Antarctic ice sheets.

FEDERAL REGULATORY UPDATES *(Continued)*

"Hitting this target for heat-trapping gases would give us a fighting chance to avoid the worst consequences of global warming," said Amy Luers, UCS California climate manager and one of the study's authors. "The study assumes both developing and industrialized countries would cut their emissions to avoid such a temperature increase. However, even with other countries taking aggressive action, the United States must make deep cuts."

The study found that the United States must cut its emissions by at least 80 percent below 2000 levels by 2050 if the world is to stay within the prescribed atmospheric concentration limit. According to the study, cutting emissions soon is essential.

"The cost of delay is high," said Michael D. Mastrandrea, research associate at the Woods Institute for the Environment at Stanford University. "If we wait until 2020 to start emission reductions, we'll have to cut twice as fast than if we start in 2010 to meet the same target."

U.S. policies under consideration vary in the timing and levels of emission cuts called for and many fail to achieve the minimum pollution cuts needed.

(Env. Tip of the Week – 10/1/07)

OSHRC REVERSES LONGSTANDING PRECEDENT ON LIABILITY

In a May 1, 2007 decision captioned as Secretary of Labor v. Summit Contractors, the Occupational Safety and Health Review Commission (OSHRC) reversed a 31-year old precedent that a general contractor is legally responsible under the Federal Occupational Safety & Health Act (OSHA) for violation of OSHA's construction safety standards, even though it did not "create" the hazard or "expose" its own employees to the underlying safety violation, solely because, as the general contractor, it controlled the workplace.

The decision is currently on appeal to the United States Court of Appeals for the Eighth Circuit. If the decision is enforced, it will significantly impact employers in the construction industry. No longer will general contractors be cited vicariously for the conduct of subcontractors. At the same time, OSHA may begin to examine more closely the actual activities of general contractors to determine whether their overall supervisory activity includes certain affirmative acts that could serve as a basis for an actual finding of direct involvement in creating the alleged safety hazard. General contractors should perform an audit of their subcontractors agreements and actual practices to ensure that they minimize, to the extent possible, conduct that will give rise to responsibility in fact for unsafe conditions created by subcontractors.

The doctrine that general contractors are vicariously responsible for OSHA violations by subcontractors, labeled the Multi Employer Worksite Doctrine, was the product of a series of policy directives issued by the Secretary of Labor and prosecuted successfully by the Secretary since OSHA's inception in 1972. The Doctrine was premised upon the fact that the general contractor could reasonably be expected to prevent conduct violative of OSHA's construction safety standards because of its general supervisory authority over subcontractors and its physical control over the worksite.

The facts of the case in which OSHRC reversed this 30-year precedent were fairly typical. Summit was the general contractor for a project to build student housing. It contracted with approximately 15 subcontractors to complete the project. All Phase Construction was the masonry contractor. All Phase used scaffolding without providing fall protection and guardrails, in violation of OSHA's construction standards. Both All Phase and Summit were cited under OSHA's construction safety standards and assessed a proposed penalty of $2,500 each. It was undisputed that Summit neither created nor exposed its own employees to the hazard. Summit's proposed citation was based exclusively upon the Multi Employer Worksite Doctrine.

Summit contested the citation and challenged the enforceability of the Multi Employer Worksite Doctrine. The Administrative Law Judge rejected Summit's contention, concluding that the Doctrine had been upheld by six circuit courts of appeal and rejected by only one circuit court. The Administrative Law Judge held that Summit had general supervisory authority over the worksite and was generally responsible for the safety of the overall workplace since it had agreed to indemnify the subcontractors' employees. The Administrative Law Judge also held that Summit maintained supervisory authority over the subcontractors by virtue of the fact that its contracts with subcontractors required subcontractors to comply with Summit's instructions regarding safety under the threat of contract termination. Based upon these factors and the application of the Multi Employer Worksite Doctrine, the Administrative Law Judge held that Summit had committed serious violations of OSHA's construction standards and should be assessed a penalty of $2,000.

Summit appealed to OSHRC. In a 2-1 decision, the Commission reversed. The Commission held that notwithstanding 30-plus years of precedent, the Multi Employer Worksite Doctrine was unenforceable. The majority of the Commission noted that the Doctrine had never been the subject of rule-making or regulation. Rather, it had been a discretionary enforcement policy of the Secretary of Labor and in fact, it had a somewhat checkered and inconsistent history with the Secretary narrowing the policy and then expanding it over the years without any substantive explanation for any of the changes made.

More importantly, the majority concluded that the Doctrine was in conflict with 29 C.F.R. 1910.12(a), the OSHA regulation governing the application of the construction industry safety standards set forth in 29 C.F.R. Part 1926.

Section 1912 (a) states:

- The standards prescribed in part 1926 of this chapter are adopted as occupational safety and health standards under Section 6 of the Act and shall apply, according to the provisions thereof, to every employment and place of employment of every employee engaged in construction work. Each employer shall protect the employment and places of employment of each of his employees engaged in construction work by complying with the appropriate standards prescribed in this paragraph. The majority held that the Doctrine was in conflict with the regulation because that regulation limited the application of the construction industry standards to the employer's own employees. The majority rejected the contention of Member Rogers in dissent that the first sentence of the regulation is meant to override the limitation in the second sentence and extended the responsibility of general contractors for OSHA compliance to employees of subcontractors.

The majority holding of the Commission is consistent with dicta articulated by the United States Court of Appeals for the District of Columbia in Anthony Crane Rental v. Secretary of Labor, 70 F.3d 1298 (D.C. Cir. 1995). There, the district court declared that the Multi Employer Worksite Doctrine was in "marked tension" with Section 1910.12(a) as described above. However, since neither party to that case had raised the issue, the court expressly left that decision for a later date.

(By Gary L. Lieber, Partner in Saul Ewing's Labor, Employment and Employee Benefits Practice Group)

NJ REGULATORY UPDATES

NEW JERSEY COURT RULING COULD HAMPER CONTENTIOUS NRD PROGRAM

A New Jersey Superior Court ruling could force the state to either finish development of a pending rule for calculating natural resource damages (NRD) or force it to provide better scientific justification for its use of a formula it has relied on to determine groundwater damages.

The court ruled Aug. 24 from the bench in New Jersey Department of Environmental Protection v. Exxon Mobil Corp. that the state failed to provide sufficient scientific backing for its use of a formula for determining natural resource damages to groundwater, according to sources following the case.

As a result, the court dismissed with prejudice claims filed by NJDEP in a case where the state had sought damages stemming from benzene and toluene contamination of private wells in Ewing Township, according to the analysis.

The department, however, failed to offer adequate expert support for the assumptions it used in the NRD formula, according to a legal analysis by the law firm K & L Gates.

The analysis says the state can either now proceed with a rule-making or, for each future case, it must gather "further scientific justification" in order to use the assumptions relied upon in the formula.

But a source with the state attorney general's office believes the ruling will have only limited impact, saying that the NJDEP, prior to the ruling, was already working on a proposed rule, and that only a handful of the state's NRD cases still rely on the formula at issue. Instead, the state has been using a different way of calculating ground-water damages that moves away from estimating the value of water and instead determines the costs of buying property in order to preserve the land, and therefore groundwater, the source says.

The suit is one of approximately 120 NRD lawsuits the state filed before a July 1 deadline set by the state legislature several years ago.

Under the law, the state had five and a half years from Jan. 1, 2002, to file an NRD lawsuit at sites where remedial investigation has been completed, sources say. In a June 29 press release, NJDEP says the state has filed about 120 such suits "that could result in hundreds of millions of dollars in compensation from polluters who have harmed New Jersey's natural resources." In particular, the state has filed suit against a host of manufacturers and companies linked to the gasoline additive methyl tertiary butyl ether (MTBE) for NRD.

"We are committed to holding accountable those polluters whose actions have sullied our rivers, land and ground water, diminishing public enjoyment of these natural resources," NJDEP Commissioner Lisa P. Jackson said in a June 29 statement. "Working closely with the Attorney General's office, we will aggressively pursue these claims through the court system until the public has been justly compensated for its losses."

(Superfund Report - 9/24/07)

NEW JERSEY BANS CREOSOTE TREATED WOOD

New Jersey Governor Jon Corzine signed into a law a bill to prohibit the manufacture, sale, use, and burning of creosote and creosote-treated wood products anywhere in the state.

Only railways, which use creosote-treated ties on rail lines, and utilities, which use creosote-treated power poles, are exempt from the provisions of this bill.

Creosote, commonly used as a wood preservative to repel insects and prevent rot and water damage of wood and wooden structures, is a hazardous substance, and is recognized by the U.S. Environmental Protection Agency as a carcinogen.

"According to the Environmental Protection Agency, creosote is a carcinogen which poses a serious threat to the health of residents and to the environment," said New Jersey Senator Stephen Sweeney, who sponsored the bill in the state Senate.

"Creosote ingestion can cause serious burns, kidney and liver damage and even death, as well as soil and ground contamination," said Sweeney. "There have to be other, safer alternatives that can be used to help preserve wood. We can't afford to sacrifice the health of our residents."

Regulated as a restricted-use pesticide, creosote is composed of over 300 chemicals known to pose a threat to the environment and human health, the legislation states.

Leakage of creosote from industrial and other hazardous waste sites and seepage from creosote-treated wood have led to the contamination of soil and groundwater of New Jersey.

Polycyclic aromatic hydrocarbons in creosote are of particular concern because they represent up to 85 percent of its weight composition and many are carcinogenic and degrade poorly.

According to the federal Agency for Toxic Substances, coal tar creosote is the most widely used wood preservative in the United States.

Over 97 percent of coal tar creosote is used for the preservation of wood. While creosote-treated wood is primarily used for railroad ties, it is also used to treat utility poles, pilings, lumber and timber, fence posts, and other wood products.

Workers in wood treatment industries are at particular risk.

People also can be exposed to creosote when reusable rail ties are sold to a secondary market for landscaping and other construction uses. The ties may be sawed by untrained people who are unaware of the hazardous pollutants, and the toxic sawdust lands on their skin or is inhaled.

NJ REGULATORY UPDATES

Over the past decade, composite railroad ties made of recycled plastic and gypsum have become an effective alternative to creosote ties. Both chromated copper arsenate and pentachlorophenol are used as wood preservatives in utility poles in place of creosote and there are non-wood alternatives including steel and cement poles.

Federally, a review of creosote is scheduled by the U.S. EPA for the winter of 2007-2008. The EPA process includes public comment periods, a technical briefing, and conference calls with stakeholders on mitigation measures.

(ENS - 7/17/07)

DEP REVISES IDLING REGULATIONS

Who is affected by this initiative?

All diesel vehicles that are used in New Jersey are subject to the Department of Environmental Protection (DEP) regulations at N.J.A.C. 7:27-14. These regulations prohibit diesel-powered vehicles from idling for more than three consecutive minutes if the vehicle is not in motion.

What has changed?

The following revisions to the Idling Regulations become effective on July 25, 2007:

Exemptions to 3 minute idling limit REMOVED:

- Diesel vehicles are no longer allowed to idle for up to 30 minutes at an operator's place of business.
- Diesel vehicles are no longer allowed to idle for 15 minutes when a vehicle has been stopped for three or more hours (however, an exemption remains allowing for 15 minutes idling when the ambient temperature is below 25 degrees Fahrenheit).
- Overnight idling of diesel trucks with sleeper berths will not be allowed past May 1, 2010, as several alternatives to idling are not available in New Jersey.

Exemption to 3 minute idling limit ADDED/CLARIFIED:

- Diesel buses may idle for 15 consecutive minutes in a 60-minute period while actively discharging or picking up passengers to allow for passenger comfort.

(NJDEP - 7/07)

NEW JERSEY VOTERS TO DECIDE $200 MILLION OPEN SPACE FUND

Governor Jon Corzine signed legislation putting an initiative on the 2007 ballot to authorize $200 million to allow the state to continue preserving open space, farmland and

NJ REGULATORY UPDATES *(Continued)*

historic sites. New Jersey is the most densely populated state in the nation.

The initiative also provides for an expanded Blue Acres program, which funds the purchase of flood-prone properties.

"Preserving New Jersey's open space, farmland and historic sites and reviving the Blue Acres program is vital to our environment and to our economy," Governor Corzine said. "I strongly encourage voters to support this initiative, which will enable us to continue this program while we work to find a permanent, sustainable funding mechanism."

If approved by voters, the $200 million is already allocated:

- $109 million for the acquisition and development of land for public recreation and conservation
- $45 million to the state
- $55 million to local governments
- $9 million for 50 percent grants to qualifying tax exempt non-profit organizations
- $73 million for farmland preservation
- $12 million to revive the Blue Acres program that allows the state to purchase properties in floodways that are prone to flood or storm damage
- $6 million for historic preservation

All grant proposals and funding requests will be reviewed and evaluated by professional staff using consistent and objective criteria, the governor said.

"As New Jersey's population continues to grow, so will the amount of space needed to house all of its residents," said Senator Stephen Sweeney, who sponsored the bill in the Senate.

(ENS - 8/6/07)

STATE MOVES AHEAD WITH EXPANDED WATER PROTECTION RULES

The state is moving forward with the expansion of water protection rules which would likely curb development in the state. If adopted, the rule amendments would limit where sewer and septic systems are placed and expand the number of streams that require 300-foot buffers from development.

With the close of the public comment period in August, Department of Environmental Protection officials began the process of adopting the two sets of amended rules. "From here, the department prepares a formal response," said DEP spokeswoman Elaine Makatura. "Then it is determined whether to adopt some or all of the amendments, or none."

Nearly 900 miles of additional waterways would be required to have a 300-foot buffer from development endangered species present in water areas in determining which waterways should be given broader protections. The buffers would protect against discharges of pollutants and runoff to streams, creeks and rivers.

In South Jersey, the plans call for buffers for Maurice River in Cumberland County; Oldmans Creek along the Gloucester-Salem County border; and Salem River in Salem County. In addition, under amendments to the Water Quality Management Plan, the DEP has proposed rolling back sewer service areas on environmentally sensitive land, and placing wastewater management plans under county jurisdiction were considered.

Municipalities would also be required to update stormwater management plans – 141 towns are without plans; 298 have outdated plans. Local officials across the state have expressed concerns that the new provisions would halt development projects in areas planned for growth. Local officials have also called county oversight of wastewater management plans an undue burden.

DEP officials said the adoption of rule amendments must be completed by May 20.

(By Trish G. Graber, Gloucester County Times - 8/22/07)

NJDEP ISSUES NEW NJPDES DISCHARGE TO GROUNDWATER TECHNICAL MANUAL

The New Jersey Department of Environmental Protection ("NJDEP") has issued a new manual on discharges to groundwater at contaminated sites and/or at sites subject to the Technical Requirements for Site Remediation ("Tech Regs"). This manual, replacing a 1999 edition, provides guidance on changes enacted by the July 2005 revisions to the New Jersey Pollutant Discharge Elimination System ("NJPDES") and Tech Regs. The manual describes how certain site remediation activities, such as injection of treated water, spray irrigation systems, or addition of any materials into the ground that meet the definition of "discharge", may now qualify for a permit-by-rule (in lieu of a individual permit). NJPDES requirements like monitoring, noncompliance reporting, and mitigation of violations still apply to permits-by-rule. The manual is available on NJDEP's Site Remediation Program website.

(Manko Gold Katcher & Fox Law Firm - 8/07)

REPLACEMENT OF TPH METHOD 418.1 FOR THE DEP SITE REMEDIATION PROGRAM

In the December 31, 2005 Federal Register, the EPA Office of Water proposed to revise 40 CFR 136 and withdraw all analytical methods that use Freon 113 as a solvent. The methods affected are 413.1, 413.2 and 418.1. The final rule was published in the March 12, 2007 Federal Register and the freon-based methods were withdrawn.

Although the methods were withdrawn, a grace period was granted to laboratories by the NJDEP Office of Quality Assurance (OQA) whereby laboratories currently holding certifications for the freon-based methods would continue to maintain certification. Other states have determined they are not dropping freon-based methods and as such, consistency issues with the National Environmental Accreditation Program (NELAP) would arise should NJDEP drop them from the list of certified methods. Additionally, numerous NJDEP permits exist that specifically require freon-based methods to be used. Currently OQA is involved with the permitting groups in the DEP to determine the magnitude of the issue with respect to permits that contain freon method- specific citations and subsequently, determine an appropriate date to remove all freon-based methods from the certification process.

The Site Remediation Program (SRP) will continue to accept total petroleum hydrocarbon (TPH) analytical data generated from samples analyzed by Method 418.1. However, the grace period offered by NJDEP OQA will not be extended indefinitely. Additionally, the SRP is not affected by the permitting issues and wants to be proactive by promoting alternative methods. As a result, the SRP will not accept Method 418.1 data generated from the analysis of all matrices sampled after September 30, 2007 including those instances where Method 418.1 was cited in an approved sampling plan. For all samples taken after September 30, 2007 (for data submitted to the SRP) there are two methods for which certification exists that would be acceptable alternatives to Method 418.1 and are to be used for the analysis of samples for petroleum products: the Diesel Range Organics (DRO) option under USEPA SW-846 Method 8015B and the NJDEP Method OQA-QAM-025, Rev.6. The methods are used under the following circumstances. When petroleum product contamination at a site is known to be diesel fuel/home heating oil/#2 fuel oil, the DRO option under USEPA Method 8015B or OQA-QAM-025, Rev.6 is to be used. When the identity of the petroleum product contamination at a site is not known, OQA-QAM-025, Rev.6 must be used. For all analyses, data deliverables, at a minimum, are to be consistent with N.J.A.C. 7:26E, Appendix A, IV, Reduced Laboratory Data Deliverables-Non-USEPA/CLP Methods, Sections 1 and 6. When petroleum product contamination at a site is known to be gasoline, samples are to be analyzed pursuant to N.J.A.C.7:26E, Subchapter 2.

The SRP is developing a new method for the analysis of samples contaminated with non-gasoline petroleum products. The method resembles the Massachusetts Department of Environmental Protection's Method for the Determination of Extractable Petroleum Hydrocarbons (EPH). The method represents a significant change in the manner in which

NJ REGULATORY UPDATES *(Continued)*

samples would be analyzed and the subsequent petroleum product data reported. The method focuses on the non-volatile fuel products and therefore, the method will be referred to as an extractable petroleum hydrocarbon (EPH) method. Given the fact the NJDEP is proposing health based soil remediation standards, it was thought to be prudent to pursue a similar track for petroleum contamination. The eventual goal is to establish a soil remediation standard for petroleum contamination using EPH to measure the concentration present. Analytically, the method separates the extract into an aliphatic and aromatic fraction, both of which are analyzed separately. Each fraction is further separated chromatograpically into specific carbon ranges, each with an assigned toxicity factor that can be used separately or in summation. There is currently no expected implementation date for EPH method. Information will be shared on the DEP/SRP website as it becomes available.

(NJDEP - 6/21/07)

NEW JERSEY'S HACKENSACK RIVER RECOVERS

The New Jersey Meadowlands Commission, NJMC, approved the purchase of 35 acres of wetlands along the Hackensack River in September over the objections of builders, who said part of the property could be a site for affordable housing.

The $2.5 million purchase pre-empts development on an ecologically valuable property where apartments and condos were proposed in the past, commission officials said. However, all but a few acres are covered with water at high tide.

The Hackensack River has been polluted and poisoned by chemicals, industrial waste and sewage for decades, but now, under the care of the commission and many citizens groups the river is coming back to life.

Ospreys, herons, falcons, striped bass and perch are returning to the lower part of the river. The section that flow through the Meadowlands is being turned into eco-parks and wildlife refuges.

The Meadowlands Board of Commissioners also announced a partnership with a team of researchers from Princeton University's Department of Civil and Environmental Engineering to study engineered soils that can immobilize and isolate contaminants at two high marsh communities at the Secaucus Wetlands Enhancement Site.

"As we continue to move forward acquiring, preserving and enhancing open space in the Meadowlands District, we are heedful of the importance of gathering and sharing information on this unique ecosystem," said Acting NJMC Chairman Charles Richman, who is also acting Commissioner of the New Jersey Department of Community Affairs.

"What we learn at the Secaucus Wetlands Enhancement Site will build upon this agency's proven track record of founding environmental policies on hard scientific data," he said.

Enhancement activities at the 42 acre Secaucus Wetlands Enhancement Site, including increasing tidal flows and enhancing biodiversity, have been underway since March 2007. Enhancement of the site, adjacent to Secaucus High School in the northern end of the city, is expected to be complete by late fall 2007.

(ENS - 9/24/07)

NEW JERSEY HAS ELIMINATED ANY STATUTE OF LIMITATIONS FOR CERTAIN ENVIRONMENTAL CRIMES

New Jersey Governor Jon Corzine has signed into law a bill (S. 1712) removing the 10-year statute of limitations for violations of New Jersey's Solid Waste Management Act, the Air Pollution Control Act of 1954, the Water Pollution Control Act, the Comprehensive Regulated Medical Waste Act, and the asbestos law, and for crimes causing or risking widespread injury or damage. Effective immediately, the legislation by its terms now removes the time-bar for any offense for which the ten-year period had not yet expired.

(By Richard A Sarachan, Ballard Spahr - 8/31/07)

BEST MANAGEMENT PRACTICES TO CONTROL MOLD IN BUILDINGS

1. Respond immediately to any reports of water leakage or musty/unusual odors.
2. Use and encourage tenants to use only HEPA vacuums for cleaning to control dust to minimal levels. A highly effective program to remove dust from remediated areas is recommended.
3. Maintain the building roof so as to avoid any leakage.
4. Keep basements and crawl spaces dry; make all surface drainage flow away from building walls.
5. If building is flat-roofed, maintain the roof in accordance with manufacturer's instructions. Re-roof prior to expiration of roofing warranty.
6. Maintain windows and doors to minimize water intrusion into porous building materials and furnishings. Inspect interior perimeters of all windows and doors twice per year.
7. Maintain exterior walls to eliminate rainwater infiltration. Inspect flashings, caulked joints and exterior door/window edges twice per year.
8. Be aware that water damaged insulation should never be allowed to remain in any building.
9. Carefully inspect all areas where building materials were subject to water damage due to flooding, pipe leakage, overflows or any other source. Inspect behind walls and ceilings.
10. Remove all water damaged materials within 36 hours.
11. Encourage tenants or other occupants to report water damage immediately.
12. Get prompt professional assistance in the event of repeated complaints, self-reported health effects, observation of significant water damage and/or before undertaking mold remediation.

FEDERAL REGISTER NOTICES

http://www.epagov/homepage/fedrgstr

Fish and Wildlife Service Endangered and Threatened Wildlife and Plants; Removing the Bald Eagle in the Lower 48 States From the List of Endangered and Threatened Wildlife; Final Rule; Endangered and Threatened Wildlife and Plants; Draft Post-Delisting and Monitoring Plan for the Bald Eagle.

(Federal Register -7/9/07)

Environmental Protection Agency National Volatile Organic Compound Emission Standards for Aerosol Coatings; Proposed Rule.

(Federal Register – 7/16/07)

Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants for Area Sources: Acrylic and Modacrylic Fibers Production, Carbon Black Production, Chemical Manufacturing: Chromium Compounds, Flexible Polyurethane Foam Production and Fabrication, Lead Acid Battery Manufacturing, and Wood Preserving; Final Rule.

(Federal Register -7/16/07)

Department of Transportation Hazardous Materials; Transportation of Lithium Batteries; Final Rule.

(Federal Register -8/9/07)

Department of the Interior Office of Surface Mining Reclamation and Enforcement Excess Spoil, Coal Mine Waste, and Buffers for Water of the United States; Proposed Rule.

(Federal Register -8/24/07)

Environmental Protection Agency Two Optional Methods for Relative Accuracy Test Audits of Mercury Monitoring Systems Installed on Combustion Fuel Gas Streams and Several Amendments to Related Mercury Monitoring Provisions; Final Rule.

(Federal Register -9/7/07)

Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources; Proposed Rule.

(Federal Register -9/17 /07)

Environmental Protection Agency Procedures for Implementing the National Environmental Policy Act and Assessing the Environmental Effects Abroad of EPA Actions; Final Rule.

(Federal Register – 9/19/07)

Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants for Area Sources: Clay Ceramics Manufacturing, Glass Manufacturing, and Secondary Nonferrous Metals Processing; Proposed Rule.

(Federal Register – 9/20/07)

Environmental Protection Agency Prevention of Significant Deterioration (PSD) for Particular Matter Less Than 2.5 Micrometers (PM2.5) – Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC); Proposed Rule.

(Federal Register – 9/21/07)

Office of Surface Mining Reclamation and Enforcement Final Rule; approval of amendment: We are approving an amendment to the Pennsylvania regulatory program (the "Pennsylvania program") regulations under the Surface Mining Control and Reclamation Act of 1977 (SMCRA or the Act). The amendment adds new section 25 Pennsylvania Code (PA Code) 86.6 which provides for the exemption from the permitting requirements of 25 PA Code Chapters 87 and 88, relating to surface mining of coal, when extraction of coal is incidental to government-financed construction or government-financed reclamation projects and specified requirements are met.

(Federal Register – 10/4/07)

Environmental Protection Agency Mercury Switches in Motor Vehicles; Significant New Use Rule.

(Federal Register – 10/5/07)

Environmental Protection Agency Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania; Carbon Monoxide Maintenance Plan Update; Limited Maintenance Plan in Philadelphia County.

(Federal Register – 10/5/07)

ASBESTOS CONTAINING MATERIALS O & M PLANS *(Continued from page 2)*

HOW MUCH DOES AN ACM O&M PLAN COST?

Surveys of small apartment buildings and residences or small commercial or industrial facilities typically less than a thousand dollars, and an O&M plan, several hundred dollars additional. For larger buildings, shopping centers, commercial facilities, and industrial facilities, the cost is facility specific, directly depending on the extent of ACM present.

IF I HAVEN'T TESTED, HOW DO I KNOW I NEED AN O&M PLAN?

Many types of building materials used before 1980, were asbestos containing, and the new regulations assume that many materials are "potentially asbestos containing". Building owners and managers who ignore this portion of the regulations incur significant liability and face potential fines if ACM is disturbed, even unknowingly.

HOW CAN I GET A QUOTE FOR PREPARING AN ACM O&M PLAN?

RT Environmental Services, Inc. (RT) has licensed asbestos inspectors covering PA, NJ and the City of Philadelphia. We will be glad to provide you a written proposal for a survey, or an O&M plan, depending on your specific needs. Call Rob McKenzie at 856-467-3476 for more information.

PENNSYLVANIA BULLETIN NOTICES

Technical Guidance &Permits – DEP ID: 012-5500-001. 2008 Environmental Education Grants Program Manual and Forms. The 2008 Environmental Education Program Manual and Forms is a guide for organizations interested in applying for the Department's Environmental Education Program.
7/27/07

Technical Guidance & Permits – DEP ID: 391-2000-14. Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Channels and Swales and Storm Sewers. This document provides guidance on the Department's process for evaluating wastewater discharges to intermittent and ephemeral streams, drainage channels and swales and storm sewers.
7/27/0

Independent Regulatory Review – The Commission issued comments on the Clean Air Interstate Rule proposed regulation.
8/11/07

Technical Guidance & Permits – Final Guidance: DEP ID: 562-3000-102. Coal and Industrial Mineral Mining Inspections. This guidance document (formerly titled "Inspections") defines the content and frequency of inspections of coal and industrial mineral mining activities by inspectors of the Department Bureau of District Mining Operations.
8/17/07

Technical Guidance & Permits – Draft Guidance: DEP ID: 562-2112-503. Bituminous Coal Surface Mining Near Underground Utility Lines and Blasting Near Underground Lines on All Mining and Construction Sites. The guidance document, formerly titled "Coal Surface Mining and Blasting Near Underground Utility Lines and Pipelines, "establishes procedures mine operators should follow when conducting mining and blasting activity underground utility lines.
8/24/07

Technical Guidance & Permits – Rescind Policy: DEP ID: 700-5600-001. Guidance for Pollution Prevention and Energy Efficiency Site Assessments. This guidance document was formerly issued by the Department to identify the policy and procedures for which it would conduct pollution production and energy efficiency site assessments.
8/24/07

Rules and Regulations – Temporary Amendments to the Water Quality Regulations, Water Code and Comprehensive Plan to Extend Designation of the Lower Delaware River as a Special Protection Water.
8/25/07

Technical Guidance & Permits – Final Guidance: DEP ID: 563-2000-003. Incidental Coal Extraction for Government-Financed Construction Projects or Government-Financed Reclamation Projects. The regulations at 25 PA Code §86.6 (relating to extraction of coal incidental to government-financed or government-financed reclamation projects) allow for an exemption from the permitting requirement for the extraction of coal to government-financed construction projects and government-financed reclamation projects under certain circumstances.
8/30/07

Technical Guidance & Permits – Draft Guidance: DEP ID: 253-0300-100. Pennsylvania's Land Recycling Program Technical Guidance Manual – Section IV General Guide substantive revisions proposed to Pennsylvania's Land Recycling Program Technical Guidance Manual – Section IV General Guide include the addition of several regulated substances to the "short list" in Table IV-9 for several petroleum and mineral oils containing PCBs.
8/30/07

Technical Guidance & Permits – Interim Final Guidance: DEP ID: 385-2000-011. Pennsylvania Combined Sewer Overflow (CSO) Policy. On March 1, 2002, the Department published a Combined Sewer Overflow (CSO) Policy to assist in meeting the goals of controlling and eliminating CSO discharge practical, and ultimately bringing all remaining CSO discharges into compliance with State water quality standards through the Pollutant Discharge Elimination System (NPDES) permitting program.
8/31/07

Technical Guidance & Permits – Final Guidance: DEP ID: 390-2100-001. Implementation Guidance for NPDES CAFO Permits and Water Quality Management Permits for Storage Facilities. This guidance document was developed to provide clarification concerning the Environmental Quality Board rulemaking on Concentrated Animal Feeding Operations and Other Agricultural Operations (25 PA Code Chapters 91 and 92 at 35 PA.B. 5796 (October 22, 2005).
8/31/07

Facility Odor Management – The State Conservation Commission (Commission) proposes to add Chapter 83, Subchapter G (relating to facility odor management) to govern odor management at certain facilities and agricultural operations.
9/1/07

Safe Drinking Water – General Update: Proposed rulemaking included major amendments to the regulation of inorganic chemicals (IOCs), synthetic organic chemicals (SOCs) and volatile synthetic organic chemicals (VOCs); minor amendments to the Filter Backwash Recycling Rule (FBRR), Lead and Copper Rule (LCR) and Radionuclide (RAD) Rule requirements; and other minor amendments to Chapter 109 to retain primary enforcement authority (primacy) and to clarify existing requirements.
9/1/07

Coal Mines: The Environmental Quality Board (Board) proposed to rescind Chapter 209 (relating to coal mines) and add Chapter 209a (relating to surface mining) to read as set forth in Annex A. The proposed rulemaking revokes existing, antiquated anthracite and bituminous safety regulations and replaces them with selected Federal safety regulations that will be adopted by reference. In addition, selected Federal safety regulations for industrial mineral mines will be adopted by reference. This proposed rulemaking was adopted by the Board at its meeting of May 16, 2007.
9/1/07

Extension of National Pollutant Discharge Elimination System (NPDES) General Permit (PAG-13) Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s). 9/8/07

Extension of Pennsylvania General NPDES General Permit for Stormwater Discharges Associated with Construction (PAG-2) 9/8/07

Consumer Products: The Environmental Quality Board (Board) proposed to amend Chapter 130, Subchapter B (relating to consumer products) to read as set forth in Annex A. The proposed rulemaking will amend the Table of Standards to add volatile organic compound (VOC) content limits for an additional 11 categories of consumer products and amend the VOC content limits for one category of consumer products currently regulated. The proposed rulemaking also adds definitions for approximately 30 new terms, including those that relate to the new product categories that will be regulated, and amends definitions for approximately 110 existing terms to provide clarity. This proposed rulemaking was adopted by the Board at its meeting of June 19, 2007.
9/19/07

Proposed Revisions to Pennsylvania's State Implementation Plan 9/15/07

Safe Drinking Water; Public Notification Revisions: The Environmental Quality Board (Board) proposes to amend Chapter 109 (relating to safe drinking water). The proposed rulemaking will strengthen the public notice requirements for imminent threat violations and situations (also known as Tier 1). The proposed rulemaking will enhance the planning requirements of both the Operation and Maintenance Plan and the Emergency Response Plan sections that relate to public notification. The proposed rulemaking amends the delivery requirements for community water, systems, as appropriate to the type and size of the water system. Finally, this proposed rulemaking provides a few more examples of situations that need to be reported to the Department of Environmental Protection (Department) within 1 hour of discovery. This proposed rulemaking was adopted by the Board at its meeting on May 16, 2007.
9/22/07

KEY HIGHLIGHTS

PA UPDATES

- One Call Law Update, pg. 3
- Conservation District Law, pg. 3
- Petroleum Constituents List Changes, pg. 4
- Montgomery County Wind Energy, pg. 4

TECHNOLOGY UPDATES

- Mold/Dampness/Asthma, pg. 6
- Diesel/Cholestrol/Cardio Disease, pg. 6
- Electrical Fields, pg. 7
- Global Warming/Storms, pg. 7
- Green Roof Success in DC, pg. 8

FEDERAL UPDATES

- 2008 Emergency Response Guidebook pg. 10
- Inorganic Arsenic Risk, pg. 11
- Oil Refinery Emissions, pg. 11
- Lithium Battery Ban, pg. 12
- OSHRC Liability Precedent, pg. 14

NJ REGULATORY UPDATES

- Creosote Wood Ban, pg. 15
- NRD Court Decision, pg. 15
- Change in TPH Method, pg. 16
- NJPDES Manual Revision, pg. 16
- The Hackensack Recovers, pg. 17

RT E-MAIL DIRECTORY

LARRY BILY	LBILY@RTENV.COM	JOE LANG	JLANG@RTENV.COM
GARY BROWN	GBROWN@RTENV.COM	JUSTIN LAUTERBACH	JLAUTERBACH@RTENV.COM
THOMAS DONOVAN	TDONOVAN@RTENV.COM	ROB MCKENZIE	RMCKENZIE@RTENV.COM
GLENNON GRAHAM	GGRAHAM@RTENV.COM	ADAM MEURER	AMEURER@RTENV.COM
CRAIG HERR	CHERR@RTENV.COM	CHRIS WARD	CWARD@RTENV.COM
WALTER HUNGARTER	WHUNGARTER@RTENV.COM		

VISIT OUR WEBSITE WWW. RTENV.COM

IN THIS ISSUE

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

PRSRT STD
U.S.Postage
PAID
Permit #159
Lehigh Valley, PA