

The RT Review

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GROUP CALLS FOR DATABASE ON IAQ-RELATED ILLNESSES

A coalition of physicians, scientists and others is calling for a comprehensive approach to various illnesses that have one thing in common: they are caused in large part by hazards found in the indoor environment.

“A method of disseminating current, on-going and accurate information to medical teaching facilities regarding these illnesses and appropriate treatments must be established as a matter of public health policy,” the group said in a recent policy statement.

One of the most urgent needs, the advocates say, is the creation of national database of patients identified by practitioners that can be accessed by collaborating researchers in the private sector and government agencies.

Advocates for individuals whose health has been adversely affected by their indoor environments are increasingly using a new term to describe the problem: Chronic Inflammatory Response Syndrome Caused by Exposure to the Interior Environment of Water-Damaged Buildings (CIRS-WDB).

Earlier this year, a new group was formed called the Action Committee on the Health Effects of Mold, Microbes and Indoor Contaminants. It is composed of physicians, scientists, researchers, indoor air quality experts, industrial hygienists, building engineers, teachers, advocates and other who are working together to promote the truth about the health effects of mold, microbes and indoor contaminants.

“We note in recent years a dramatic increase in published studies from the private sector, US government agencies and international health agencies with a focus on various and diverse human health effects acquired following exposure to the interior environment of water-damaged buildings,” the group said.

In addition to a new national database, also needed are the developments of a standard protocol for therapy based on the results of collaboration of actual practicing physicians, and an accelerated search for newer therapies based on genomics testing.

(continued on page 14)

NEW REPORT: DEVELOPING ENERGY STORAGE TECHNOLOGIES AMONG CRUCIAL STEPS TOWARD INCREASING RENEWABLE ELECTRICITY ON NATION'S GRID

U.S. policymakers must focus more closely on developing new energy storage technologies as they consider a national renewable electricity standard, according to one of the principal recommendations in a newly released report, *Integrating Renewable Electricity on the Grid*, by the American Physical Society's Panel on Public Affairs (POPA). Establishing a national renewable electricity standard will help to unify the fragmented U.S. grid system—an important step in the wider adoption of using more wind and solar for energy generation.

But, without the focus on storage devices, it will be difficult to meet proposed renewable electricity standards, the report asserts. Wind and solar energy are variable by nature: The sun doesn't always shine, and the wind doesn't always blow. The amount of electricity a consumer has available to complete household chores could change in a matter of seconds, hours or days—placing great importance on the need for robust storage methods.

Another challenge facing the grid involves the long-distance transmission of renewable electricity from places that receive a lot of wind and sun to those that do not. “We need to move faster to have storage ready to accommodate, for example, 20 percent of renewable electricity on the grid by 2020,” said George Crabtree, co-chairman of the POPA study panel and a senior scientist at Argonne National Laboratory. “And, by devoting the necessary resources to the problem, I am confident that we can solve it.”

The report addresses variability and transmission issues by urging the U.S. Department of Energy (DOE) to increase research on materials to develop energy storage devices and by encouraging the DOE to focus on long-distance superconducting direct current cables to bring renewable electricity to load centers, lessening the chance that power will be disrupted. The report also calls for examining renewable electricity in light of a unified grid instead of one that is fragmented and improving the accuracy of weather forecasts to allow for better integration of renewable electricity on the grid.

The APS report is unique among grid studies:

Its recommendations cover both scientific and business perspectives.

Specific recommendations for the Report include that the U.S. Department of Energy (DOE) should:

- Develop an overall strategy for energy storage in grid-level applications that provides guidance to regulators to recognize the value that energy storage brings to both transmission and generation services on the grid;
- Conduct a review of the technological potential for a range of battery chemistries, including those it supported during the 1980s and 1990s, with a view toward possible applications to grid energy and storage; and
- Increase its research and development in basic electrochemistry to identify materials and electrochemical mechanisms that have the highest potential use in grid-level energy storage devices.

DOE should:

- Extend the Office of Electricity program on High Temperature Superconductivity for 10 years, with a focus on direct current superconducting cables for long-distance transmission of renewable electricity from source to market;
- Accelerate research and development on wide band gap power electronics for controlling power flow on the grid, including alternating to direct current conversion options and development of semiconductor based circuit breakers operating at 200 kilovolts and 50 kilo amperes.

Business Case

The Federal Energy Regulatory Commission and the North American Electric Reliability Corporation should:

- Develop an integrated business case that captures the full value of renewable generation

(continued on page 2)

TABLE OF CONTENTS

Staff and Project News	2
Federal Regulatory Updates	4-7
Technology Updates	7-9
NJ Updates	9-12
PA Updates	13

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NEW REPORT: DEVELOPING ENERGY STORAGE TECHNOLOGIES AMONG CRUCIAL STEPS TOWARD INCREASING RENEWABLE ELECTRICITY ON NATION'S GRID

(continued from page 1)

and electricity storage in the context of transmission and distribution; and

- Adopt a uniform integrated business case as their official evaluation and regulatory structure, in concert with the state Public Utility Commissions.

Forecasting

The National Oceanic and Atmospheric Administration, the National Weather Service, the National Center for Atmospheric Research and private vendors should:

- Improve the accuracy of weather and wind forecasts on time scales from hours to days.
- Forecast providers, wind plant operators and regulatory agencies should:
- Develop uniform standards for preparing

and delivering wind and power generation forecasts.

Wind plant operators and regulatory agencies should:

- Develop operating procedures to respond to power generation forecasts.
- Develop criteria for contingencies, the response to up-and-down-ramps in generation and the response to large weather disturbances.
- Develop response other than maintaining conventional reserve, including electricity storage and transmission to distant load centers.

For more information, go to:

www.aps.org/about/pressreleases/integrating-elec.cfm

(American Physical Society – 11/16/10)

RT STAFF AND PROJECT NEWS

Justin Lauterbach and Marcel Tourdot are completing environmental due diligence assignments, for a key Pittsburgh lender. One recent assignment included a property in Hazelton, where predemolition asbestos and hazardous material survey work, was completed.

Gary Brown and Larry Bily recently completed work on an Expert Report involving a northern New Jersey retail petroleum service station. The work included a site visit, and research into petroleum tanker delivery equipment to help form opinions in the case. Larry Bily, Gary Brown, and Justin Lauterbach, also completed environmental audit work for a western Pennsylvania service provider.

Two new staff members joined RT, in recent months. Ken Eden has 14 years of experience which includes Phase I and II Environmental Site Assessment work and in-depth experience on field assignments, at sites being evaluated and remediated, under Superfund. Ken has a degree in Geology from Kutztown University. Cortney Savidge is working with Chris Ward at a south Jersey chemical products site, where evaluation of soil and groundwater is underway, under New Jersey's Industrial Site Recovery Act Program. Cortney has a degree in Ecology from Drexel University.

Ahren Ricker is hard at work on an *in situ* petroleum impacted soil/groundwater remediation project, in Atlantic City. Ahren has accepted additional responsibility to special-

ize on *in situ* treatment of soil and groundwater remediation projects.

Adam Messner and Craig Herr are working on a project involving evaluation of former oil lagoons, in the Conshohocken area. The site is near the Schuylkill River, and careful drilling techniques are being used, due to site conditions.

Walter Hungarter and Gary Brown are working on a south Philadelphia project, where indoor air quality problems occurred, due to improper roof removal and replacement. RT has proposed a new approach to remediation and reconstruction, of the roof, to resolve the IAQ issue, which has been ongoing for some time.

Work also continues on the Gloucester City Southport project, with NJDEP and the US EPA planning to make one of the former industrial sites an example project, worthy of national profiling when the project remediation is completed in about a year. Glenn Graham and Jacci Evans are key RT project participants.

At **RT Review Press Time** RT is pleased to report that we experienced a continued upward sales and revenue trend, through the year. Many buyers are looking at real estate bargains, and Brownfields work also continues on an upward trend. As always, we appreciate the opportunity to be of service, and look forward to doing so in 2011 and beyond.

Gary Brown, P.E.
President

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RT'S SOUTHWEST PA OFFICE IS LOCATED ON THE HISTORIC NATIONAL ROAD

Western Pennsylvania is rife with historical facts and information. Our Southwest PA office is located on US Route 40, otherwise known as National Road. It is not named as such for respect to our nation but for the vital role it has played in our nation's development and growth. It is commonly referred to "Americas Road to Revolution" The original trail included approximately 90 miles from Cumberland Maryland to Wheeling WV. It expanded into the first federal highway in 1806 with the approval from Thomas Jefferson. Today it passes through twelve states from New Jersey to Utah.

While passing thru Washington Pa, it is named Maiden Street., our office is located at 591 East Maiden. As you leave our Washington office, within four blocks there are two significant landmarks. First is the Bradford House. It is the site where David Bradford led local farmers into the Whiskey Rebellion, the first public challenge to the federal government.

Second, is the site of the LeMoyné House. It was the residence of Dr. Francis J. LeMoyné, a leading abolitionist and founder of the Western Abolition Society in 1824. The Western Abolition Society founded and operated the Underground Railroad. There are multiple homes surrounding our office that still have hidden stairwells and rooms that were utilized during the civil war. I had the honor several months ago to see one of them in a neighbor's home. The doorway is cut along the lines of bead board and is virtually unnoticeable. The "room" was quite small and in one of the eaves of the house. Although beautifully decorated, it was unnerving imagining the men, women and even children who stopped there on their way to freedom.

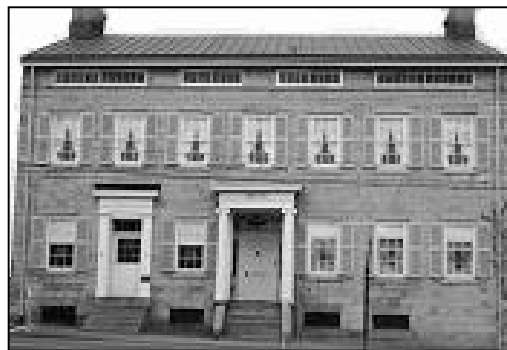
Heading east from our office, approximately 10 miles away in Scenery Hill is The Century Inn. It is a beautiful old inn with the dining room downstairs and rooms for rent upstairs. The inn provided rooms, food and rest for many pioneers heading west. Like other inns along the

route, providing food and shelter but also but also the site for political discussions, and social reformation for travelers and locals. Century Inn is the oldest hostelry along National Pike.

Continuing thru Scenery Hill another 20 miles is Uniontown. Long before the National Road was constructed through Pennsylvania, the first battle of the French & Indian War in 1750 was fought at Fort Necessity, just outside of Uniontown. Colonial troops led by 22-year-old Colonel George Washington were defeated.

There are countless history lessons to be learned on National Road. While traveling it, not only do you notice the beautiful hills and historic towns with original buildings it passes it through, you will also find the original mile markers and hundred of historic signs, statues and recognitions of all that has transpired along the route.

National Road, National Trail and National Pike, are all references to US Route 40. The road served this area quite well during formative years of our country and continues to do so today.



FEDERAL REGULATORY UPDATES

EPA IDENTIFIES AREAS VIOLATING LEAD STANDARDS

The U.S. Environmental Protection Agency (EPA) has determined that 16 areas across the country are not meeting the agency's national air quality standards for lead. These areas, located in 11 states, were designated as "nonattainment" because their 2007 to 2009 air quality monitoring data showed that they did not meet the agency's health-based standards. Exposure to lead may impair a child's IQ, learning capabilities and behavior.

Areas designated as not meeting the standard will need to develop and implement plans to reduce pollution to meet the lead standards. Nonattainment areas must meet the standards by Dec. 31, 2015.

EPA will designate areas as meeting or not meeting the standards in two rounds. In the first round announced today, EPA is designating areas that do not meet the standards based on air quality monitoring data from the existing lead monitoring network. In October 2011, EPA will use data from new monitors to complete a second round of designations that will classify the remaining areas in attainment, unclassifiable or nonattainment.

In October 2008, EPA strengthened the nation's air quality standards for lead tenfold to 0.15 micrograms of lead per cubic meter of air. The agency also finalized requirements for new monitors to be located near large sources of lead emissions. EPA has data from existing monitors indicating violations of the standards, and is currently collecting data from new monitors that began operation in January 2010.

Designated Areas Include:

- Lower Beaver Valley, PA
- Lyons, PA
- North Reading, P
- Granite City, IL
- Muncie, IN
- Eagan, MN
- Bellafontaine, OH
- Cleveland, OH
- Delta, OH

Additional areas will be designated in October 2011.

(EPA – 11/16/10)

EPA SUED OVER LEAD IN AMMUNITION

Three environmental groups sued the Environmental Protection Agency in late November to force it to prevent lead poisoning of wildlife from spent ammunition and lost fishing tackle.

The lawsuit was filed in U.S. District Court by the Center for Biological Diversity, Public Employees for Environmental Responsibility and the hunters group Project Gutpile. It comes after the EPA denied their petition to ban lead ammunition and lead fishing tackle, which the groups say kills 10 million to 20 million birds and other animals a year by lead poisoning.

"The EPA has the ability to protect America's wildlife from ongoing preventable lead poisoning, but continues to shirk its responsibility," said Jeff Miller, conservation advocate with the Center for Biological Diversity.

The lawsuit asks a judge to order the EPA to develop rules to prevent wildlife poisoning from spent lead ammunition and fishing tackle.

In August, the EPA denied the ammunition part of the petition, saying it didn't have authority under the Toxic Substances Control Act. A few weeks ago, it rejected the fishing tackle portion, saying the petition didn't demonstrate a ban was necessary to protect against unreasonable risk of injury to health or the environment, as required by the law.

In the lawsuit, the groups say that EPA erred when it said it didn't have the authority to ban lead ammunition. They argued that the legislative history of the Toxic Substances Control Act makes it clear that components of ammunition — shots and bullets — may be regulated as chemical substances.

The groups' original petition cited nearly 500 peer-reviewed scientific articles that they said document the toxic effects of lead on wildlife, and the lawsuit argues that large amounts of lead continue to be deposited into the environment. According to the lawsuit, animals often mistake lead shotgun pellets and fishing tackle for food, grit or bone fragments, and avian scavengers are particularly vulnerable to lead in carcasses, gut piles and wounded prey species.

Gordon Robertson, Vice President of the American Sportfishing Association, said the EPA got the decision right the first time.

"We fundamentally think this is the jurisdiction of state fish and wildlife agencies to address these types of problems where they may exist," he said.

(By Frederic J. Frommer, *Courier Post*, 11/25/2010)

EPA PLANS SUPPLEMENT TO 5-YEAR REVIEW GUIDE TO HANDLE VAPOR INTRUSION

EPA is developing supplemental Superfund guidance in order to address vapor intrusion pathways under mandatory five-year reviews of cleanup remedies because the agency is seeing an increasing number of vapor intrusion cleanup issues surface during the reviews, according to an EPA regional source.

The supplemental guidance comes as EPA is disputing with the Navy at a former Naval air station in California over whether a remedy — reevaluated in a second five-year review — is still protective despite potential risks related to vapor intrusion. The Navy, which says it relied on precedent to determine that its remedy is still protective, criticizes EPA for failing to have a policy in place on how to address newly emerging vapor intrusion contamination in five-year remedy reviews when the original cleanup plan never evaluated such exposures.

But, the EPA regional source says the agency does not need final guidance in order to make decisions about vapor intrusion pathways and protectiveness at the site. Nonetheless, EPA plans to issue a supplement to a 2001 five-year review guidance to address vapor intrusion pathways in five-year reviews, the source says, noting that in many cases vapor intrusion was not evaluated in original remedies. EPA Region IX will be looking at vapor intrusion pathways at a number of sites,

FEDERAL REGULATORY UPDATES

- Lead in Ammunition, pg. 4
- New DOT Rules, pg. 4
- Coal Ash TRI Reporting, pg. 6
- Conductivity Limits, pg. 6

and in many cases that will occur in the five-year review process, the source says.

Under Superfund law, five-year reviews of cleanup remedies are required in order to determine whether remedies where contaminants remain at significant levels pose unacceptable risks. The reviews assess the performance of remedies to ensure they are protecting human health and the environment. At federal facility sites, the responsible federal agency must conduct the five-year review, submit it to EPA, and then EPA determines in writing whether it concurs or not with the review.

At issue in the California case is whether the remedy is protective at a site on the former Naval Air Station Moffett Field, a Superfund National Priorities List site, given there are still potential long-term exposure risks to volatile organic chemicals (VOCs) through vapor intrusion. Both EPA and the Navy agree there are no short-term health risks from the vapors, but EPA has non-concurred with the Navy on the protectiveness of the site's remedy.

In correspondence, EPA Region IX says the remedy "is not protective because it does not adequately address potential health risks from long-term exposure to trichloroethene (TCE) and tetrachloroethene (PCE) through the vapor intrusion pathway." Vapor intrusion was not evaluated in the original remedy at the site.

In a July 7 letter, EPA Region IX makes reference to its current five-year review guidance, which says that remedies should be considered not protective if "potential or actual exposure is clearly present or there is evidence of exposure." The agency says there are buildings on Moffett Field within a vapor intrusion study area that haven't yet been sampled or assessed for vapor intrusion.

"Until all the buildings within the Vapor Intrusion Study Area have been adequately addressed, EPA cannot agree with the Navy's conclusion that the current vapor intrusion exposure pathway is incomplete and that there is no current exposure to Site contaminants exceeding EPA's indoor air cleanup levels for long-term exposure," EPA Region IX says in the letter.

EPA in the letter says several actions need to be taken to ensure the remedy's protectiveness: finalize an amendment to the record of decision for the site on the vapor intrusion pathway, finish baseline sampling of buildings for vapor intrusion, and implement remedial actions and institutional controls at buildings within the vapor intrusion study area.

(SUPERFUND REPORT – 8/9/10)

NEW DOT RULES WENT INTO EFFECT OCTOBER 1

Three DOT final rules have an October 1, 2010 effective date for mandatory compliance. The first of these three rules was published in the March 9,

FEDERAL REGULATORY UPDATES (Continued)

Federal Register revising the previous thresholds that triggered the requirement for shippers or carriers to have a site specific hazardous materials security plan. The new thresholds become mandatory October 1, 2010, however voluntary compliance with the new thresholds was allowed as early as April 8, 2010. Note that the revised criteria are less stringent. When reading the list, a “large bulk quantity” is defined as 3,000 L or 3,000 kg.

According to the new rule (49 CFR 172.800(b)), you must develop and implement a security plan based on a site specific risk assessment if you offer for transportation or carry any of the following:

- Any quantity of a Division 1.1, 1.2, or 1.3 material;
- A quantity of a Division 1.4, 1.5, or 1.6 material requiring placarding in accordance with 49 CFR 172.504(c);
- A large bulk quantity of Division 2.1 material;
- A large bulk quantity of Division 2.2 material with a subsidiary hazard of 5.1;
- Any quantity of a material poisonous by inhalation, as defined in 49 CFR 171.8;
- A large bulk quantity of a Class 3 material meeting the criteria for Packing Group I or II;
- A quantity of a desensitized explosives meeting the definition of a Division 4.1 or Class 3 material requiring placarding in accordance with 49 CFR 172.504(c);
- A large bulk quantity of a Division 4.2 material meeting the criteria for Packing Group I or II;
- Any quantity of a Division 4.3 material;
- A large bulk quantity of a Division 5.1 material in Packing Groups I and II;
- Perchlorates; or ammonium nitrate, ammonium nitrate fertilizers, or ammonium nitrate emulsions, suspensions, or gels;
- Any quantity of organic peroxide, Type B, liquid or solid, temperature controlled;
- A large bulk quantity of Division 6.1 material;
- A select agent or toxin regulated by the Centers for Disease Control and Prevention under 42 CFR 73 or the United States Department of Agriculture under 9 CFR 121;
- A quantity of uranium hexafluoride requiring placarding under 49 CFR 172.505(b);
- International Atomic Energy Agency (IAEA) Code of Conduct Category 1 and 2 materials including Highway Route Controlled quantities as defined in 49 CFR 173.403 or known as radionuclides in forms listed as RAM-QC by the Nuclear Regulatory Commission;
- A large bulk quantity of Class 8 material meeting the criteria for Packing Group I.

In addition to the original plan components, the following additional information must now be added:

- Identification of the job title of the senior management official responsible for overall development and implementation of the plan
- Security duties for each position or department that is responsible for implementing the plan or a portion thereof and the process of notifying employees when specific elements of the security plan must be implemented; and
- A plan for training hazmat employees

The plan must be reviewed annually and updated or revised as necessary. The most recent

version of the plan must be made available to employees consistent with their need to know and security clearance.

The second final rule with the effective date of October 1, 2010, is titled, “Miscellaneous Packaging Amendments.” The rule was published in the February 2, 2010, Federal Register and includes the following revisions to hazardous material packaging requirements:

- Amends several packaging related definitions;
- Adds provisions to allow more flexibility when preparing and transmitting closure instructions, including adding the ability to do this electronically;
- Adds a requirement for shippers to retain packaging closure instructions;
- Incorporates new language that will allow for a practicable means of stenciling the UN symbol on packagings;
- Adds requirements for the construction, maintenance, and use of large packagings; and
- Clarifies a requirement to document the methodology used when determining whether a change in packaging configuration requires retesting as a new design or may be considered a variation of a previously tested design

The most significant impact of this rulemaking is that 49 CFR 173.22 now requires that shippers retain a copy of the packaging manufacturer’s closure instructions for one year after a shipment, unless the instructions are permanently embossed or printed on the package.

The third final rule with an effective date of October 1, 2010, was published in the September 1, 2010, Federal Register. In this rule, DOT is requiring that all shippers utilizing outsourced or contracted 24-hour phone numbers must provide the following information:

- Name of the person registered with the service; or
- Contract number registered with the service; or
- Unique identifier assigned by the emergency response information (ERI) provider.

This new information must appear on the shipping paper immediately before, after, or below the emergency response phone number unless it already appears elsewhere on the shipping paper in a prominent location which is readily visible and easily identified.

Persons who register with these services must pay the appropriate fee and supply the ERI provider with the current information (e.g., MSDS) prior to the shipment. This amendment ensures that in the event of an emergency, a person calling the ERI provider can directly reference the registrant and consequently improve response time. This information is found in 49 CFR 172.604.

(*Env. Resource Center – 9/14/2010*)

SURFACE COATING NESHAP DEADLINES APPROACHING

The National Emission Standard for Hazardous Air Pollutants (NESHAP) has several upcoming deadlines for auto body shops, surface coaters, and paint strippers that are classified as area sources of hazardous air pollutants—sources that emit less than 10 tons per year of a single haz-

ardous air pollutant or less than 25 tons per year of a combination of hazardous air pollutants. Existing sources in operation before September 27, 2007, are required to be in compliance with 40 CFR 63, Subpart HHHHHH by January 10, 2011. Existing sources must certify they are in compliance by March 11, 2011. You must comply with this federal rule in addition to your state’s regulations. The Texas Commission on Environmental Quality has developed helpful fact sheets, forms, and related guidance.

(*Env. Resource Center – 10/4/2010*)

SPCC COMPLIANCE DATE EXTENDED FOR CERTAIN FACILITIES

EPA is proposing to extend the compliance date by one year for certain facilities subject to recent amendments to the Spill Prevention Control and Countermeasure (SPCC) rule. The agency is also announcing that certain facilities will not be eligible for the one year extension and will have to comply by the current date of November 10, 2010.

Last year, EPA amended the SPCC rule to strengthen certain provisions. Regulated facilities are required to amend and implement these changes as part of their overall SPCC plans. The purpose of the SPCC rule, which was finalized in 1973, is to establish requirements for facilities to prevent a discharge of oil into navigable waters or adjoining shorelines. EPA has no SPCC jurisdiction over drilling, production or workover facilities seaward of the coastline.

This latest SPCC rule amendment extends the dates in 40 CFR 112.3 by which the owners or operators of certain SPCC regulated facilities must prepare or amend and implement an SPCC Plan, and reconciles the proposed compliance dates for new production facilities. The proposed compliance date for certain facilities is November 10, 2011. EPA is also proposing to delay the compliance date for facilities with milk containers, associated piping and appurtenances that are constructed according to the current applicable 3-A Sanitary Standards, and subject to the current applicable Grade “A” Pasteurized Milk Ordinance (PMO) or a State dairy regulatory requirement equivalent to the current applicable PMO.

Types of facilities not eligible for the proposed extension that must comply by November 10, 2010 include: drilling, production or workover facilities that are offshore or that have an offshore component, and onshore facilities required to have and submit facility response plans (FRPs), due to the threats these facilities could pose of significant oil spills to navigable waters or adjoining shorelines.

Types of facilities that may be eligible for the proposed one year extension include: oil production, farms, electric utility plants, petroleum refining and related industries, chemical manufacturing, food manufacturing, manufacturing facilities using and storing animal fats and vegetable oils, metal and other manufacturing, real estate rental and leasing, retail trade, contract construction, wholesale trade, other commercial, transportation, arts entertainment & recreation, other services (except public administration), petroleum bulk stations and terminals, education, hospitals & other health care, accommodation and food ser-

FEDERAL REGULATORY UPDATES (Continued)

vices, fuel oil dealers, gasoline stations, information finance and insurance, mining, warehousing and storage, religious organizations, military installations, and government facilities.

In summary, the proposed rule would:

- Extend the date by which the owners or operators of certain facilities must prepare or amend and implement an SPCC plan by one year to November 10, 2011
- Delay the compliance date for facilities with milk containers that are constructed according to the current applicable 3-A sanitary standards, and subject to the current applicable grade “A” pasteurized milk ordinance (PMO) or a state dairy regulatory requirement equivalent to the current applicable PMO until one year after EPA finalizes a rule for these facilities.
- Maintain the current November 10, 2010 compliance date for drilling, production and workover facilities that are offshore or that have an offshore component, and for onshore facilities required to have and submit FRPs
- Reconcile the proposed compliance dates for new production facilities

The proposed amendments do not remove the regulatory requirement for owners or operators of facilities in operation before August 16, 2002 (other than facilities with milk containers described above), to maintain and continue implementing an SPCC plan in accordance with the SPCC regulations then in effect. EPA is seeking comment on whether a shorter extension period (6 to 9 months) is warranted for facilities rather than the proposed one year extension. In considering a shorter compliance extension period, EPA is requesting comments on the criteria to consider, such as discharge history, size and type of facility, potential risk posed, and ability to come into compliance.

For the latest compliance schedule updates, go to:
http://www.epa.gov/emergencies/content/spcc/compliance_dates.htm.

(Env. Resource Center – 8/3/2010)

EPA TO FINALIZE OZONE NAAQS BY DECEMBER 31, 2010

The National Association of Clean Air Agencies reported that EPA filed a court motion on November 1 indicating that the agency will require an additional two months—until December 31, 2010—to finalize its reconsideration of the 2008 ozone National Ambient Air Quality Standards (NAAQS). The motion was filed in the U.S. Court of Appeals for the D.C. Circuit and it requested that the court continue to hold in abeyance the cases challenging the 2008 ozone NAAQS.

(Env. Resource Center – 11/8/2010)

EPA VOWS ‘CASE-BY-CASE’ OVERSIGHT TO ENSURE TRI REPORTING FOR COAL ASH

EPA officials are vowing to conduct “case-by-case” oversight to ensure power plants and other generators of coal ash and coal combustion residuals (CCRs) report their waste releases to the agency’s Toxics Release Inventory (TRI) even before the agency makes its landmark determina-

tion on whether to strictly regulate the waste as “hazardous.”

The officials told EPA’s Nov. 1-4 Annual National Training Conference on TRI, held in Washington, DC, that the oversight is needed in part because the agency’s current policy may not be clear about when releases must be reported. This has made it difficult in at least one recent case to obtain data about coal ash leachate from landfills and impoundments, prompting concerns that it could contaminate groundwater.

One agency official says the agency does not “yet” have a regulatory definition of “waste” that is subject to TRI reporting, though the official stopped short of saying the agency is crafting guidance to clarify when CCRs and other wastes are subject to reporting requirements.

One industry representative argues that the interpretation constitutes “one more effort on the part of EPA to do anything it can to get utilities to stop using coal,” and could serve as a deterrent to beneficial reuse efforts.

The agency’s stepped up efforts to ensure better reporting of coal ash releases comes as officials are also weighing whether to regulate CCRs under strict hazardous waste requirements or under less stringent solid waste requirements. The agency earlier this year floated two options for regulating the waste — either as a “special waste” subject to subtitle C handling and disposal requirements under the Resource Conservation & Recovery Act (RCRA) or to less stringent “solid waste” rules under subtitle D.

The comment period on EPA’s proposal closed on November 19.

Under section 313 of the Emergency Planning Community Right to Know Act (EPCRA), EPA generally requires coal ash destined for roadfill, landfill, or mining reclamation to be reportable. The general guidance message is that “waste” is subject to TRI reporting requirements if “material management constitutes disposal,” according to presentations from agency officials at a Nov. 3 session on coal ash reporting under TRI.

But, EPA’s Region III TRI manager, Bill Reilly, told that session that when to report coal ash as a waste release under EPCRA remains murky. “Some issues with TRI make this a little bit of a gray area,” he said.

For example, some facilities which distribute coal ash containing EPCRA section 313 chemicals into commerce for use in concrete manufacturing, are exempt from TRI reporting as a processing activity under the statute’s *de minimis* exemption, though coal ash as a raw material for a product, such as cement manufacturing, is currently reported.

The exemption would also apply to releases and other waste management activities associated with these processing activities, but TRI chemicals in ash which is sent off-site for use as roadfill, landfill, and mining reclamation are considered waste management activities, and subject to reporting, Reilly said.

For RT’s Comments to EPA on the proposed CCR Rules, go to:

www.rtenv.com/archives/emails/nov23_2010.pdf
(click here Hot Link to RT Email Blast).

(SUPERFUND REPORT – 11/15/2010)

EPA Seeks More Information

In the *Federal Register* notice, EPA asks for more information on whether and how tank owners and operators can demonstrate compatibility for their existing systems since documentation may be hard to come by, and digging up the system is expensive.

This issue may be of particular concern to gas station owners, potentially the group most affected by the E15 guidance. Most gas stations are individually owned and sell fuel from the large oil companies under contract. The facilities change hands often and have little excess cash to install new UST systems — which can cost more than \$100,000 — if the existing ones are not found to be compatible, the industry source says.

(Inside EPA – 11/18/2010)

SAB SUGGESTS EPA’S STRICT ‘CONDUCTIVITY’ LIMIT MAY NOT PROTECT WATERS

EPA’s science advisers are suggesting that the agency’s controversial “conductivity” water quality limit for mountaintop mining might be insufficient to adequately protect aquatic life, though the advisers stopped short of recommending how much stricter the agency’s standard should be. The finding is at odds with the stance taken by several coal and mining industry groups that have raised a broad range of scientific and legal concerns to argue that the limit is too strict.

The advisers also urge EPA not to simply expand the benchmark beyond the Appalachian states where it applies, cautioning that geological differences might warrant a different benchmark in other states. And they suggest that conductivity itself is a fairly “coarse” measure of water quality, recommending EPA produce more data linking conductivity to the toxic pollution it is intended to measure.

A panel of EPA’s Science Advisory Board (SAB) has been reviewing since this summer two draft science reports EPA is using to justify the strict new limits it says should be included in Clean Water Act (CWA) permits for mountaintop mining activities. According to a draft SAB review of one of those reports, “A Field-Based Aquatic Life Benchmark For Conductivity in Central Appalachian Streams,” the advisers suggest the conductivity measure EPA is using could be too weak.

Conductivity is a measure of salinity in a waterbody, and EPA says the metric can serve as a proxy for pollution from sulfate and bicarbonate ions caused by valley fills of mining waste. EPA used the two scientific reports undergoing SAB review to justify setting a 300 microsiemens per centimeter (uS/cm) benchmark in its mining permit guidance.

EPA says in the guidance that operations that maintain conductivity below 300 uS/cm generally would meet the standards of the CWA, while conductivity exceeding 500 uS/cm generally would violate the act.

While SAB’s draft review generally endorses the science report, it says the 300 uS/cm benchmark may not be sufficiently protective. SAB says EPA should consider a stricter endpoint for setting

FEDERAL REGULATORY UPDATES (Continued)

a conductivity benchmark than the one the agency used.

SAB panel members will participate in two public conference calls on the draft reports later this month. Following completion of the peer review and review of hundreds of public comments submitted on the reports, the reports will be revised and published as a final report. EPA plans to finalize its guidance on surface mine permitting by April 1, 2011.

The conductivity report analyzed field data on insect populations in streams in West Virginia and Kentucky to arrive at the benchmark, which it said would prevent the local loss, or extirpation, of 95 percent of organisms within a stream.

But, the SAB panel notes in its Sept. 28 draft review of the report, "The complete loss of a genus is an extreme ecological effect and not a chronic response. Thus, a benchmark based on extirpation may not be protective of the stream. A 'depletion concentration,' defined as the level of a stressor that results in a specified reduction in abundance, may be a more appropriate endpoint for development of a conductivity benchmark."

SAB also notes that the benchmark study excluded from its data set genera that were observed at fewer than 30 sites, an approach that the panel said could exclude rare organisms that

could be especially sensitive to conductivity and could be important for performing biological assessments. The panel also faults the report for only considering insects and not accounting for the effects of conductivity on species of fish, muscels or other organisms. "Some method to address the influence on the benchmark of rare species or addition of non-insect species is warranted," the panel says.

The SAB panel is strongly supportive of the overall approach used in the reports, especially the use of field data rather than laboratory tests to establish the benchmark. In backing the field-based approach, the SAB panel counters a key argument raised by industry that lab studies are preferable when establishing water quality standards.

The panel says the report would improve if it "more explicitly confronted the issues surrounding the use of laboratory testing to estimate ecological effects," such as their inability to account for the extent to which organisms become acclimated to stressors, and their limitation to a smaller number of species.

"In contrast, the survey data are very powerful information for inferring causal plausibility, especially compared to even chronic laboratory tests," the SAB panel writes. "Despite their weaknesses,

the survey results have exceptional ecological realism compared to even chronic toxicity tests conducted in the laboratory and provide a stronger basis for inferring causality in the streams below [mountaintop mining valley fill] activities."

EPA is considering expanding its use of conductivity as a water quality criteria beyond the six states where it is applying the mining permitting guidance that includes the benchmark. The SAB panel cautions the agency to be deliberate in its approach and not to simply apply the 300 uS/cm benchmark elsewhere, because the observed effects of that benchmark in the study are based on geologically similar soil throughout the region that allows the conductivity benchmark to serve as a proxy to measure pollution caused by sulfate and bicarbonate ions.

In its review of the second draft EPA report, "The Effects of Mountaintop Mines and Valley Fills on Aquatic Ecosystems of the Central Appalachian Coalfields," SAB observes that limits on conductivity and total dissolved solids "are relatively coarse indicators of water quality," and suggests EPA make a more robust connection between conductivity and ionic pollution.

(SUPERFUND REPORT – 10/4/2010)

TECHNOLOGY UPDATES

HOOVER DAM – NEW TRAFFIC BYPASS

Pedestrians were permitted to walk across the new landmark bridge linking Arizona and Nevada some 900 ft above the Colorado River and across the vast expanse of the Black Canyon during an October 16 celebration of the Hoover Dam Bypass completion, days before the crossing was scheduled to open to traffic. The first concrete and steel composite arch bridge to be constructed in the United States, the structure spans the canyon at a location roughly 1,500 ft. south of Hoover Dam. It was constructed to siphon traffic from the portion of U.S. Route 93 that extends atop the dam, a roadway that had become clogged by traffic that exceeded the road's capacity and was forcing drivers to contend with sharp turns, narrow lanes, and inadequate shoulders. Route 93 serves as a critical thoroughfare linking Arizona, Nevada, and Utah, and it extends all the way to Canada and Mexico, making it a significant trade route for North America. The recently completed \$240-million project, which includes 1.2 mi of approach spans in Arizona, 2.3 mi of roadway in Nevada, and the 2,00 ft long arch bridge- the longest concrete arch bridge in North America- will enable all but local traffic to bypass the Hoover Dam crossing completely. The bridge was designed for the Federal Highway Administration's Central Federal Lands Highway Division by the Hoover Support Team , a group comprising HDR, Inc., of Omaha, Nebraska; T.Y. Lin International, of San Francisco; and Jacobs Engineering (formerly Sverdrup), of Pasadena, California. The design was selected on the basis of its aesthetics and economy, and its twin-rib concrete arch and lightweight steel superstructure lent themselves to a rapid and efficient construction process. Known officially as the Mike O'Callaghan- Pat Tillman Memorial Bridge, the

new crossing honors two prominent local citizens.
(Civil Engineering- November 2010)

NEW DOCUMENT AND WEB RESOURCES

Impacts of DNAPL Source Treatment: Experimental and Modeling Assessment of the Benefits of Partial DNAPL Source Removal (EPA 600-R-09-096). When it is not practical or economically feasible to achieve complete DNAPL mass depletion using aggressive remediation techniques, it must be determined if the aggregate benefits of partial DNAPL mass depletion are sufficient to reduce risks to an acceptable level and if the costs associated with this partial depletion are justified by the benefits received. This report summarizes field, lab, and modeling research conducted to address these issues, with the primary objective being the development of a scientifically defensible approach for assessing the long-term environmental impacts (benefits) of DNAPL removal from source zones (September 2009, 172 pages). View or download at <http://clu-in.org/tech-pubs.htm> .

(Tech Direct – 8/1/2010)

HUDSON CLEANUP REVIEW COULD BOLSTER INDUSTRY EFFORT TO LIMIT DREDGING

The expert panel reviewing the cleanup of the Hudson River is urging EPA to slow dredging of contaminated sediment in order to limit the amount of contamination resuspended in the water column, a suggestion industry officials claim bolsters their long-standing calls for EPA to limit the dredging of historical contamination generally.

EPA is interpreting the recommendations differently, however, noting that the panel says the Hudson cleanup can be completed safely if the

TECHNOLOGY UPDATES

- Hudson River Cleanup, pg. 7
- Nitrogen in Ecosystems from Humans, pg. 8
- Mercury in Flooring, pg. 8
- Engine Friction Wastes Energy, pg. 8

agency alters its standards for the project.

The panel Aug. 15 issued a draft report urging EPA to adjust its performance standards in order to shift the focus of the potentially precedent setting dredging project toward limiting the amount of polychlorinated biphenyls (PCBs) that are resuspended in the water column rather than maximizing the overall speed of the cleanup.

Earlier this year, the General Electric (GE) Company, which is responsible for the contamination and cleanup, argued the performance standards EPA had established for the project were unfairly more rigorous than those used at other sediment dredging sites. The dispute is significant since the dredging project is widely considered unprecedented in terms of the scope of contamination and technical challenges it involves.

The company argued that the various standards were in conflict with each other, saying that efforts during the first phase of the project to comply with the resuspension standards slowed the pace of dredging, which in turn made it difficult to comply with the productivity standard, which addresses the speed of the cleanup. Conversely, efforts to comply with the productivity standards prompted violations of EPA's resuspension and air quality standards, GE claimed.

GE, which has yet to commit to completing the cleanup, argued EPA needs to modify the standards to resolve the conflict, but suggested that no matter

TECHNOLOGY UPDATES (Continued)

how the agency adjust the standards, there will still be negative consequences. Dredging at a slower rate could reduce individual instances of exceeding EPA's resuspension standard, but over time will increase the cumulative negative impacts to fish in the river. GE claimed (*Superfund Report*, Feb. 8).

However, the peer review panel charged with reviewing data from the first phase of the cleanup says in its draft report that the next, much more extensive, phase of the cleanup can safely remove the bulk of the PCB contamination if EPA's standards are modified and if the modeling the agency and GE use to estimate the depth of the contamination is improved.

One industry source says the panel's suggestion that the Hudson cleanup may need to be slowed in order to limit the resuspension of PCBs underscores the arguments of some industry officials at other sites where sediment is contaminated that dredging historical contamination from river bottoms does more harm than good and that EPA should limit the amount and scope of dredging projects it orders at contaminated waterbodies generally. Dredging as been a part of cleanup at several sites, including those in New Jersey, Washington and Oregon.

The industry source argues that dredging is only beneficial in cases where tide patterns are causing a section of contaminated sediment to be constantly reexposed to water and claims that in most cases the contamination is covered by enough clean soil to prevent contamination from entering the food chain and thus is better left alone.

But, EPA says in an Aug. 16 statement that a "quick read of the conclusions [in the draft report] indicates that the peer reviewers agree the second phase of the project can and should be implemented to remove PCBs and achieve the goals of cleaning up the Hudson. . . The Agency agrees that additional work and changes to performance standards are needed in order to proceed with Phase 2 successfully, and will take into account the detailed recommendations of the peer reviewers as it evaluates options for how we will move forward."

In its draft report, the panel also recommends that EPA modify its dredging methodology in order to complete the cleanup of individual contamination hotspots more quickly, saying that "repeated dredge passes and prolonged exposure of sediments" at individual hotspots increased the amount of residuals released into the water and slowed down the overall progress of the cleanup.

Overall, however, the panel recommends shifting the focus of the standards away from emphasizing how much sediment should be dredged per year so that GE can concentrate on limiting resuspension of the contaminants and the amount of residuals left behind. In this vein, the panel suggests eliminating the aspect of EPA's productivity standard that dictates how much sediment should be dredged in total by the end of the cleanup and urges the agency to modify its annual targets based on the fact that GE was unable to meet them during the first phase.

(SUPERFUND REPORT – 8/23/2010)

STUDY CLAIMS HUMAN ACTIVITIES OVERLOAD ECOSYSTEMS WITH NITROGEN

According to a recent study, excess nitrogen that

is contributed by human activities pollutes fresh waters and coastal zones, and may contribute to climate change. Nevertheless, such ecological damage could be reduced by the adoption of time-honored sustainable practices.

Appearing in the Oct. 8, 2010 edition of *Science* and conducted by an international team of researchers, the study was partially funded by the National Science Foundation.

The nitrogen cycle - which has existed for billions of years - transforms non-biologically useful forms of nitrogen found in the atmosphere into various biologically useful forms of nitrogen that are needed by living things to create proteins, DNA and RNA, and by plants to grow and photosynthesize. The transformation of biologically useful forms of nitrogen to useful forms of nitrogen is known as nitrogen fixation.

Mostly mediated by bacteria that live in legume plant roots and soils, nitrogen fixation and other components of the nitrogen cycle move through the atmosphere, plants, subsurface plant roots, and soils; the nitrogen cycle involves many natural feedback relationships between plants and microorganisms.

According to the paper, since pre-biotic times, the nitrogen cycle has gone through several major phases. The cycle was initially controlled by slow volcanic processes and lightning and then by anaerobic organisms as biological activity started. By about 2.5 billion years ago, as molecular oxygen appeared on Earth, a linked suite of microbial processes evolved to form the modern nitrogen cycle.

But, at the start of the 20th century, human contributions to the nitrogen cycle began skyrocketing. "In fact, no phenomenon has probably impacted the nitrogen cycle more than human inputs of nitrogen into the cycle in the last 2.5 billion years," said Paul Falkowski of Rutgers University, a member of the research team.

"Altogether, human activities currently contribute twice as much terrestrial nitrogen fixation as natural sources and provide around 45 percent of the total biological useful nitrogen produced annually on Earth," said Falkowski. Much of the human contributions of nitrogen into ecosystems come from an 800 percent increase in the use of nitrogen fertilizers from 1960 to 2000.

Another problem: Much of nitrogen fertilizer that is used worldwide is applied inefficiently. As a result, about 60 percent of the nitrogen contained in applied fertilizer is never incorporated into plants and so is free to wash out of root zones, and then pollute rivers, lakes, aquifers and coastal areas through eutrophication.

In addition, some reactions involving nitrogen release nitrogen oxide into the atmosphere. Nitrogen oxide is a greenhouse gas that has 300 times (per molecule) the warming potential of carbon dioxide. In addition, nitrogen oxide destroys stratospheric ozone, which protects the Earth from harmful ultraviolet (UV-B) radiation.

"Natural feedbacks driven by microorganisms will likely produce a new steady-state over time scales of many decades," said Falkowski. "Through this steady state, excess nitrogen added from human sources will be removed at rates equivalent to rates of addition, without accumulating."

At Lake Atitlan in Guatemala, excess nitrogen

promotes algae growth, which leads to eutrophication.

But, meanwhile, the Earth's population is approaching 7 billion people, and so ongoing pressures for food production are continuing to increase. "There is no way to feed people without fixing huge amounts of nitrogen from the atmosphere, and that nitrogen is presently applied to crop plants very ineffectively," said Falkowski.

(Science, Environmental Protection – 10/18/2010)

BATTLING THE FORCE THAT WASTES 1 OUT OF EVERY 10 GALLONS OF GASOLINE IN CARS

Engine friction—the force that wastes almost 1.4 million barrels of oil per day in cars and trucks in the United States alone—could become less of a problem for fuel-conscious consumers thanks to promising new oils and other materials that scientists are developing. That's the topic of the cover story in the current issue of *Chemical & Engineering News (C&EN)*, ACS' weekly news-magazine.

C&EN Senior Business Editor Melody Voith notes that friction, the heat produced when objects rub together, wastes fuel in engines and other machinery and causes their parts to wear and eventually break down. One in every 10 gallons of gasoline in the average car goes to overcoming friction in the engine—about 1.4 million barrels of oil wasted per day or almost \$31 billion worth of fuel (at \$60 per barrel) lost every year. The article describes how high-tech lubricants and additives now in development could vastly reduce the effect of friction and improve energy efficiency in everything from car engines to power-generating wind turbines. That could improve the fuel economy of cars by 3-5%, according to one estimate.

Scientists are also trying to reduce wear on engine and machine parts, one of the consequences of increased friction, by designing tougher materials that can better withstand extreme heat and other harsh conditions. One promising approach is the use of nanoparticles—super-strong particles just 1/50,000th the width of a human hair—to coat engine parts and make them more slippery.

(Env. Resource Center – 10/25/2010)

MERCURY IN POLYURETHANE FLOORING – A NEW ISSUE

Polyurethane rubber flooring (e.g., a rubberized gymnasium floor or outdoor track) may contain 1% - 2% of elemental mercury depending on when and where it was manufactured. An issue of concern may be the mercury off-gassing from the flooring material as it deteriorates. As vapor intrusion has become more of a hot-button issue in the environmental world, instances of mercury vapor impacts were being identified in schools. However, when the sources were investigated further, it turned out the contamination was not always from one of the more likely culprits (soil or groundwater contamination, thermostats/thermometers, mercury-containing bulbs, etc.) but rather from the polyurethane flooring in the gymnasiums. While it appears the manufacturers now have a way to make the flooring without leaving any significant amount of residual mercury in the end product, there may be many schools (and other uses) that might have an issue from the old flooring product.

TECHNOLOGY UPDATES (Continued)

With vapor intrusion standards being what they are these days (or maybe more accurately what they are not), finding a mercury vapor issue associated with one of these floors seems to have the potential to create a myriad of issues depending on the levels found.

(By Clinton Taw Cole – Hartman, Simons & Wood LLP – 11/18/2010)

SAN DIEGO STREET SWEEPING PILOT STUDY

The City of San Diego Storm Water Department is committed to protecting water quality and preserving natural resources in San Diego. Clean water regulations enacted by the U.S. Environmental Protection Agency and the California State Water Resources Control Board require municipalities to implement projects that address local water quality issues. In San Diego, more than two dozen water body segments are considered impaired.

Study Setup

The department implemented a Street Sweeping Pilot Study to determine if enhanced sweeping is a cost-effective solution for reducing pollution and meeting existing and future total maximum daily load compliance targets. The two goals of the project are:

1. To determine whether different sweeping frequencies help reduce pollution, specifically debris and fine metal particles, in both residential and commercial areas; and
2. To find out if newly acquired vacuum-assisted

sweepers are more efficient or cost-effective than conventional sweepers.

The two-year study began in April 2008; at the time of publication, it was near completion. Two wet seasons and two dry seasons were included to increase the validity of the data.

The first phase included dry-weather debris analysis to determine the most effective and efficient sweeper technology and sweeping frequency. The second phase included a wet-weather analysis to determine if enhanced sweeping produced any beneficial impacts to water quality.

Equipment tested against the city's currently owned mechanical sweeper were a regenerative-air sweeper and a vacuum sweeper.

Facts & Figures

Research has shown that because fine particulates (e.g., brake dust) tend to collect in gutters, street sweeping is more effective when the sweepers can reach the gutters. Therefore, streets contained within the study areas were posted with "no parking" signs for the duration of the study. Because a focus of the study was to identify the impacts of enhanced sweeping, the sweeping frequencies in all three areas were increased at different rates.

All debris collected from each pilot area was weighed prior to being isolated in individualized collection bins for sampling. A debris analysis was subsequently conducted.

The sweeper comparison portion of the study was implemented by sweeping pilot areas with three sweeper types for a set period of time, at the same

frequency and using the same analysis protocol.

Finally, to determine the beneficial impacts of enhanced sweeping on water quality, a wet-weather comparative analysis was conducted in one area.

Initial Conclusions

Since the study began, San Diego has swept the equivalent of more than 9,500 miles of streets and collected more than 381 tons of trash and debris. A significant amount of heavy metals has been removed from city streets as well.

The Storm Water Department initially promoted the study with media, information sheets and web-site updates. While responses were generally positive, many of the more complex scientific details were not easily understood. Also, new route time frames, new parking restrictions and the amount of signage installed caused concern for many citizens.

Although the city continues to analyze data in order to make recommendations, preliminary results indicate that street sweeping has a positive impact on water quality by providing an effective means of reducing pollutant concentrations in storm water runoff.

Comparisons indicate that a vacuum sweeper is more effective in reducing pollution than a mechanical sweeper under certain conditions (e.g., topography). The data also indicates that conducting aggressive sweeping using a vacuum sweeper is more efficient than sweeping at the same frequency with a mechanical sweeper.

(By Clem Brown & Jennifer Nichols Kearns – Stormwater Solutions 7-8/2010)

NJ UPDATES

IN THE PINELANDS, TINY BEETLE SPELLS BIG TROUBLE

The pest is no larger than a grain of rice, but its voracious appetite is changing the landscape of South Jersey, denuding large patches of the sprawling Pinelands.

Dendroctonus frontalis, the Southern pine beetle, has devoured up to 14,000 acres of pine trees this year in Burlington, Cumberland, Salem, Atlantic, and Cape May Counties - about five times the area affected seven years ago, state officials said.

And the bothersome, oblong-shelled pests show no sign of letting up. They've been found as far north as Monmouth County.

With no dormant period, they eat, reproduce, and spread during even moderate winters.

"This year, the population really took off. It's exploding," said David Finley, regional forester for the Forest Service in the state Department of Environmental Protection.

One reason may be changing weather patterns, Finley said. Warmer winters have allowed the beetles to survive farther north.

At the same time, spring lightning strikes and summer droughts have stressed many trees in the Pinelands' 1.1 million acres. Armies of beetles have overwhelmed the defenses of pines, leaving behind brittle brown needles and skeletal frames.

The insects have been found from New Jersey to Texas and from Arizona to Honduras, federal officials said.

They haven't shown up this year in

Pennsylvania, where traps were set to detect them, according to state entomology and forestry officials. In New Jersey, the story is much different.

"It's a serious threat, partly because the terrain is flat," making it easier for the beetles to move to new trees, said Jim Lashomb, a professor of entomology at Rutgers University in New Brunswick.

"There are lots of trees per acre, and their vigor goes down as the roots compete with other trees for water and nutrients," he said. "The drought adds to the stress."

The beetles infest all species of pine, but prefer pitch, shortleaf, pond, and loblolly, which grow across South Jersey. The white pine is not as attractive because its wood is harder and bark thinner.

"It's the resin flow from the trees that dictates the ability to thwart an attack," Lashomb said. If trees "have lots of resin, they can drown [the beetles] right there, but that diminishes when you have a drought."

Southern states have had more experience with the infestation.

"I worked on this in Mississippi when there was an outbreak in 1978," Lashomb said. "We stopped it in certain spots" by harvesting trees and cutting a barrier around the affected area.

"The northern edge of the problem was in Maryland in 1975, with some in Delaware," he said. "When they'd begin moving further north, the cold winters would kill them."

NJ UPDATES

- Pinelands Beetle Damage, pg. 9
- LSRP-DEP Consultation, pg. 10
- Public Access Rules, pg. 10
- EPH Guidance Update, pg. 10

The beetles were detected in New Jersey as early as 1939, but the first significant numbers were noted in 2001, state officials said. Nearly 1,300 acres of pines were destroyed in 2002 and more than 2,500 acres were ruined in 2003.

"We'd find them sticking around Cape May County. Then we noticed them going up the Maurice River and moving north to Monmouth County," Finley said. They've also been seen in Lakewood, Ocean County.

New Jersey forests "are neglected and overstocked," said Bob Williams, a certified forester and consultant for private landowners who discovered the beetle infestation in 2001. "We have a forest health problem."

Williams said the state must better manage the forest by thinning and burning trees so the rest are healthy enough to resist the insects. "If you don't pay for that, then you'll have to pay more for reclamation of the forest," he said.

On the front line of the battle against the beetles is Thomas Hirshblond, a forest technician now cutting down pines in Buena Vista Township, Atlantic County, as a break against the insects.

He's working on a 70-acre property where 20

NJ UPDATES (Continued)**Figure 1. Summary of Dry- Weather Data Collection**

Sweeper Type	Debris Swept (Ib.)	Broom Miles Swept	Copper(Ib.)	Lead (Ib.)	Zinc(Ib.)
Mechanical	325,560	4,784	12.2	6.2	61.4
Regenerative-Air	302,120	3,274	12.3	8.9	45.3
Vacuum	134,880	1,494	7.8	10.3	23.7
Pilot Study	762,560	9,552	32.3	25.4	130.4

acres are already dead. He'll cut down about 11/2 acres of infested trees, then create a 21/2-acre buffer to further prevent the spread.

"I know where they are and I have to cut ahead of them," he said Wednesday. "This is some real nice pitch pine - many of them are 80 feet tall - so we really want to stop" these beetles.

With their yellow and reddish hues, damaged trees are easy to spot from the air. Eventually, they turn brown and drop their needles, making the Pinelands more vulnerable to the spread of fire.

The beetles are attracted to trees that have been hit by lightning. "The bark ruptures and the tree boils, and that causes a tremendous flow of attractants in the air," Lashomb said.

"Pheromones from females attract males, and egg galleries are constructed, girdling the trunk," he said.

The beetles and larvae then feed on the cambium, the soft part under the bark, and cut the tree's resin canals. The insects carry a fungus that clogs the tree's vascular system, Finley added.

Getting rid of them is more easily done by Mother Nature than humans. State officials can spray, though that's expensive and difficult, or harvest trees to excise and isolate the problem, as Hirshblond is doing. But what's most efficient in eliminating the beetles is below-freezing temperatures.

"Cold winters kill them and drive them south," Lashomb said. "This won't be over here until we've had a couple good years of cold winters."

(By Edward Colimore, Philadelphia Inquirer, 11/25/2010)

NJDEP V. ESSEX CHEMICAL CORP – NO NRD'S

In this recent case, Essex Chemical had been cleaning up groundwater contamination using in-situ bioremediation to the satisfaction of the Site Remediation Program within DEP. It originally began that cleanup under the Environmental Cleanup Responsibility Act (since amended and renamed the Industrial Site Recovery Act) in 1984.

The Office of Natural Resource Restoration (ONRR) sued for natural resource damages. The damages were calculated based upon an excavation and removal of the source area and pumping and treating groundwater in order to accelerate the cleanup. Then, a Resource Equivalency Analysis was used by ONRR to calculate compensatory damages for the ten years it would take to complete the (more expensive) cleanup. This is not an unusual calculation in New Jersey, even though no one was using the groundwater, and there was no evidence that the groundwater contamination in this case adversely affected any

environmental receptors.

The trial court held, after trial, that the DEP had not proven its entitled to natural resource damages. It had not shown any need for the accelerated cleanup or any loss of use of the resource that would have to be compensated. Accordingly, it dismissed the complaint. The judge specifically expressed dismay over the disconnect between two decades of work by SRP and the inconsistent litigation position by ONRR.

(Courtesy – David Mandelbaum, Greenberg Traurig, LLP – 8/2/10)

EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) GUIDANCE DOCUMENTS UPDATED

The following documents pertaining to extractable petroleum hydrocarbons have been updated:

"Protocol for Addressing Extractable Petroleum Hydrocarbons" (new Version 5.0) "EPH Protocol and EPH Method Phase-in" (new Version 3.0) "Frequently Asked Questions for Petroleum Hydrocarbons" (new Version 4.0) "Analysis of Extractable Petroleum Hydrocarbon Compounds (EPH) in Aqueous and Soil/Sediment/Sludge Matrices (NJDEP EPH 10/08 Revision 3)" (aka "EPH Method"; new Version 3.0) "Extractable Petroleum Hydrocarbon (EPH) Calculator Spreadsheet" (new Version 2.0).

Also, the web page "Updates to Petroleum Hydrocarbon (PHC) Guidance" (www.nj.gov/dep/srp/guidance/rs/phc_update.htm) is being deleted as the information on it is no longer relevant.

The documents have been updated to address two issues:

1. The NJDEP EPH Method Revision 3 has been modified to allow for a non-fractionation option. This option is applicable in two situations for soil samples: (a) all #2 fuel oil/diesel oil discharges and (b) non-#2 fuel oil/diesel oil discharges where the total EPH concentration is below 1,700 mg/kg. The other documents have been updated to reflect this modification to the NJDEP EPH Method.

2. The phase-in timeframes for use of the new NJDEP EPH Method, the EPH calculator, and the sample-specific EPH criterion for non-#2 fuel oil/diesel oil discharges have not been modified, however, additional language has been added for clarification of these timeframes and their application to remedial action work plans and remedial action reports already submitted to the Department.

The updated documents can be found at the following URLs. Please note that the URLs for

the EPH Method and the EPH Calculator have been changed; please note this if you have saved these URLs as Favorites or Bookmarks for your web browser.

EPH Protocol:

www.nj.gov/dep/srp/guidance/srra/eph_protocol.pdf

EPH Phase-in:

www.nj.gov/dep/srp/guidance/srra/eph_phasein.pdf

EPH FAQ:

www.nj.gov/dep/srp/guidance/rs/eph_faq.htm

EPH Method:

www.nj.gov/dep/srp/guidance/srra/eph_method.pdf

EPH Calculator:

www.nj.gov/dep/srp/guidance/srra/EPHCalculator.xls

DEP-LSRP TECHNICAL CONSULTATION**TECHNICAL REQUIREMENTS FOR SITE REMEDIATION (N.J.A.C. 7:26E)**

The Department has established a process to allow Licensed Site Remediation Professionals (LSRPs) and remediating parties to meet with experienced DEP staff to ask site specific technical questions. This service is being offered for new cases (that have initiated remediation after November 4, 2009) or existing cases (initiated remediation before November 4, 2009) that have opted in to the LSRP program.

Technical Consultation sessions will be held in face-to-face meetings to discuss technical issues related to the remediation of a site. These consultations will assist compliance with the Department's applicable Site Remediation rule requirements and technical guidance.

More information:

www.nj.gov/dep/srp/srra/technical_consultation/

DEP UNVEILS DRAFT PROPOSED PUBLIC ACCESS RULES

The Department of Environmental Protection in August unveiled draft proposed rules for enhanced public access to the state's coastal and other tidal waters, suggesting reasonable regulations but also employing additional, common sense measures to enhance public access.

Making the draft proposed rules publicly available for discussion prior to the official public comment period is one component of the DEP's comprehensive efforts to go above and beyond the normal rulemaking process to ensure the most effective rules that best serve all of the residents of New Jersey.

"We are guided in our efforts by the standards set forth in Gov. Chris Christie's Executive Order No. 2," said Commissioner Martin, referring to an order that directs state agencies to establish rules based on common sense principles and in consultation with stakeholders.

Throughout development of these rules, the DEP has sought and continues to seek the

NJ UPDATES (Continued)

engagement of the public, elected officials, environmental advocates, property owners and businesses.

"We believe we can significantly enhance public enjoyment and use of the ocean, bays, and other tidal waters by applying common sense principles of governing; by working with local governments, which best understand local circumstances and by eliminating unnecessary burdens on residents, businesses, and government entities," Commissioner Martin said.

The public discussion on the draft rules precedes the normal rulemaking process; it does not replace, shorten, or otherwise change the normal 60-day comment period and any public hearings.

The Department earlier this year undertook its review of the public access rules, in part, because the courts have struck down provisions of existing rules, the Legislature has put a moratorium on implementation of provisions requiring marina access, and the DEP recognized that a more common sense approach to the rules could enhance access.

The New Jersey Shore and riverfront communities annually draw millions of tourists, who walk the boardwalks, enjoy our piers, and eat and drink along our waterways, fish in our waterways and navigate our waters for recreation.

The environmental health and public accessibility of the ocean, shore and tidal waterways also are inextricably tied to New Jersey's economic health.

Tourism, mostly tied to Shore communities, is a \$38 billion per year industry in New Jersey.

Draft proposed rules:

www.state.nj.us/dep/cmp/access/pa_rule_draft_100816.pdf

DEP public access page:

www.state.nj.us/dep/cmp/access/

Governor's Executive Order No. 2:

www.state.nj.us/infobank/circular/eocc2.pdf

DEP LAUNCHES OFFICE OF DISPUTE RESOLUTION

As part of its commitment to customer service, the Department of Environmental Protection has launched an Office of Dispute Resolution to help find common ground between the Department and the regulated community to prevent differences from becoming full-blown legal battles.

"The Office of Dispute Resolution will play a key role in achieving our goal of breaking down the barriers that have often existed between the DEP and businesses, individuals and local governments," Commissioner Bob Martin said. "This office will head off potentially costly and lengthy litigation that may not have been needed had both sides simply met first to work out their differences. In finding common ground, however, we will not compromise protection of the environment."

DEP decisions regarding permits or enforcement actions often trigger appeals, usually in the form of a request for a hearing by the Office of Administrative Law. The time between filing of an appeal and the case being heard in court is often frustratingly slow, and may hinder good

projects as well as implementation of actions to protect the environment.

"This process often breeds contention," said Commissioner Martin. "We need to change this mindset and look for solutions right out of the gate."

Dispute resolution is a common practice used in both the private and public sectors to mediate solutions to potentially difficult disputes. While the DEP's new Office of Dispute Resolution will not be able to mediate every type of case, it will be able to help in many areas, including water and land use permit and compliance issues, penalty assessments and alleged failures to comply with permit conditions.

The office cannot mediate challenges to DEP rules, regulations or policies, nor can it mediate disputes between private parties.

The office is headed by Tina Layre, a 24-year DEP veteran who has worked extensively on site remediation settlement agreements, cost-recovery cases, enforcement issues and cases involving bankruptcies. She will serve as an impartial mediator between the regulated community and the relevant DEP program.

NJDEP PROPOSES REGULATORY FIX TO IMPENDING REMEDIATION DEADLINES AND OVERLY CONSERVATIVE "IEC" DEFINITIONS

The New Jersey Department of Environmental Protection (NJDEP) released a proposed rule-making and compliance advisory on October 4 that will make significant changes to address two significant concerns of the regulated community under the existing Site Remediation Act Regulations: (1) the need to extend certain rapidly approaching regulatory and mandatory site assessment and remediation deadlines and (2) the need to revise the overly conservative definition of, and requirements for mitigating, vapor intrusion (VI) immediate environmental concern (IEC) conditions. While the announced regulatory changes are only in proposed form, the NJDEP compliance advisory indicates the agency will exercise its enforcement discretion to apply the proposed changes now as if they were final. Public comments on the revisions were due by December 3, 2010.

Extension of Regulatory and Mandatory Deadlines

NJDEP acknowledged the growing concern of the regulated community that, without relief from the current deadlines for (1) submission of receptor evaluations (REs), (2) addressing LNAPL and (3) completion of preliminary assessment s(PAs) and site investigations (SIs), a large number of site remediation cases will end up under the NJDEP direct oversight program rather than in the far more flexible LSRP program. This problem and the significance of the regulatory and mandatory deadlines were the subject of a recent article in MGKF's August 2010 Client Alert. To address this concern, the proposed rules would do the following:

Receptor Evaluation: The deadlines for the

initial RE have been extended such that any case initiated prior to March 1, 2010 would have until March 1, 2011 to meet the regulatory time frame to submit the RE and until March 1, 2012 to meet the mandatory time frame (REs for most existing cases were previously due by November 26, 2010). Cases initiated after March 1, 2010 have one year after initiation to meet the regulatory deadline and two years to meet the mandatory deadline.

Free Product Recovery: The regulations have been clarified such that the regulatory and mandatory time frames apply to the installation of "interim remedial measures" to address free product as distinguished from the installation of a free product recovery system. The dates for each deadline have been extended to coincide with the new dates for the initial RE - for cases beginning prior to March 1, 2010, one year from that date for the regulatory deadline, and two years for the mandatory deadline, and for cases initiated after March 1, 2010, one and two years from initiation, respectively.

PA/SIs: The deadlines to submit a PA or SI are modified so as to only apply where either the ISRA or UST regulations require the submission of such reports. The time frames have also been changed to coincide with the dates for submission of the initial RE, as set forth above.

Revisions to VI IEC Regulations

New Regulatory Trigger: The current regulatory trigger for applying the VI IEC requirements – the indoor air screening level (IASL) – was extensively criticized as being overly conservative and inconsistent with NJDEP's Vapor Intrusion Guidance. In response, NJDEP has proposed that the regulatory trigger for the VI IEC requirements be revised to the rapid action level (RAL) pursuant to the Vapor Intrusion Guidance. The published RALs can typically run anywhere from 2 times to 10 times the IASL. If a published RAL does not exist, you must contact NJDEP which will establish a site-specific RAL.

New IEC Time Frames and Non-IEC Requirements:

In addition to eliminating the IEC reporting, notification and mitigation requirements unless an RAL is exceeded, the proposed IEC revisions also extend the time period for mitigating a VI IEC from 5 days to 14 days, in recognition of the fact that site access issues often can not be resolved within 5 days. NJDEP also proposes new requirements when indoor air contaminants are identified above IASLs but below RALs. In these instances, although the condition does not constitute an IEC, a party will still be required to submit the indoor air data to NJDEP within 14 days of identifying the exceedance; submit a mitigation plan to NJDEP within 60 days; implement the mitigation plan within 120 days; and submit a mitigation response action report to NJDEP within 180 days.

*(By Bruce S. Katcher and Jonathan H. Spergel
– Manko Gold Katcher & Fox – Client Alert –
10/6/2010)*

NJ UPDATES (Continued)

NJ COURT INVALIDATES COAH'S THIRD ROUND REGULATIONS

On October 8, 2010, the Appellate Division issued its long-awaited decision regarding the validity of the Council on Affordable Housing's (COAH) rules governing affordable housing production in New Jersey. In the Matter of the Adoption of N.J.A.C., 5:96 and 5:97 by the New Jersey Council on Affordable Housing invalidates the growth share regulations COAH has used to calculate a municipality's Third Round obligation for the period of 2000 to 2018. The court held the growth share formula still provided an avenue by which a municipality could reduce its affordable housing obligation by suppressing all growth in the municipality. Specifically, the court reiterated a prior conclusion it reached in 2007 that the growth share methodology adopted in the original Third Round rules "was invalid because it allowed a municipality to avoid any substantial responsibility for satisfying its obligations to provide affordable housing by adopting land use reg-

ulations that discourage growth." The court upheld the long-standing constitutional principles first enunciated in Southern Burlington County NAACP v. Mt. Laurel, finding that allowing exclusionary zoning policies to reduce affordable housing is an anathema to the state constitution.

The court also invalidated particular regulations that are part of COAH's Third Round rules that allowed municipalities to provide unrealistic "housing opportunities." The court nullified rental bonus credits for units addressing First and Second Round obligations not yet built; rules requiring a 25 percent affordable housing set aside without a substantial density bonus; rules allowing municipalities to propose affordable housing projects without specifying the location of sites or source of funding; and bonuses for compliance from the years 2004 to 2008.

The effect of these rulings will limit municipal affordable housing options to only those options that provide a realistic opportunity for development. Inclusionary development zoning will

become the primary basis by which municipalities will meet their affordable housing obligations, given limitations as to municipal funding for 100 percent affordable housing projects. Finally, the court refused to enter a stay of its ruling during the five-month period the court required COAH to formulate new rules. The court will consider stays only on a case-by-case basis.

The implications associated with this decision are substantial. This ruling fundamentally returns New Jersey to the affordable housing regulatory requirements established in the 1987-1999 period and forever puts to rest the concept of growth share. Any client interested in developing residential housing in New Jersey should be aware of the implications of this decision and how the court's ruling will affect residential zoning in the future.

(By Henry L. Kent-Smith and Thomas D. McCloskey, Fox Rothschild – 10/2010)

161 VOLUNTEER HOURS ON LITTLE TINICUM ISLAND

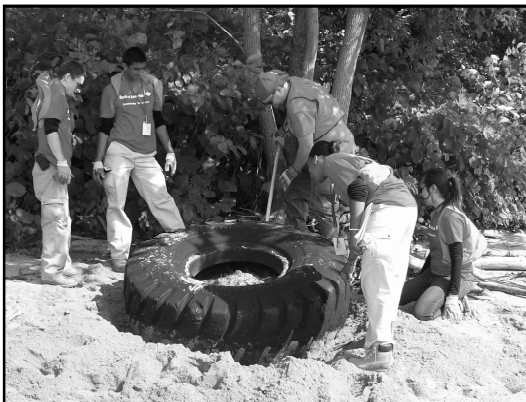
If you're not familiar with the International Coastal Cleanup, it's a good time to learn about their 25 year history. Ocean Conservancy, along with corporate sponsors and local communities, work each year to call attention to the massive amount of marine debris that is deposited all over the world. By 2009 the organization can claim responsibility for removing 135 million pounds of trash from our shorelines. It is done through partnering with PA Cleanways- Keep Pennsylvania Beautiful and a multitude of local and national sponsors.

Little Tinicum Island is approximately 200 acres located in the Delaware River and is home to many federally protected birds and mammals. The efforts of so many keep bald eagles, hawks, owls, falcons, bats and other in a clean environment. The island also houses scrub forests, brush marshes and tidal marshes.

During the 2009 International Coastal Cleanup, 498,818 volunteers picked up 7.4 million pounds of marine debris, in 108 countries and locations around the world and 45 US states and the District of Columbia. The organization has spent more than 20 years gathering information and tracking debris in our waterways. Their work is paying off and here are 10 things we can all do to help.

- Use mass transit, carpool, walk, jog, ride a unicycle. Carbon dioxide is bad and our oceans are absorbing half of what we produce.

- Take only pictures on vacation and don't touch coral or marine life.
 - Be a green boater, take a trash bag with you and be careful of oil, gasoline and solvents.
 - When dining out or cooking at home, ask for sustainable seafood.
 - Volunteer to pick up some trash. It's an exercise that makes everyone more aware and careful.
 - Reduce – choose items that have been packaged "green". Support those businesses.
 - Reuse – 60% of the trash picked up in 2009 was disposable. Good cause to reuse shopping bags, reusable water bottles, coffee mugs and food containers.
 - Recycle- Don't take the easy way out and just throw it out. Find a new use, new home, or properly recycle it.
 - Everything runs downhill into our oceans. Don't use pesticides or solvents inside or out.
 - Vote blue – Ultimately we need the law to be on our side so vote for the person who has the environment as a priority.
- Here are photos of recent coastal cleanup work in Delaware County, PA.



FOR MORE INFORMATION CONTACT:

Ocean Conservancy, 1300 19th Street NW, 8 th Floor, Washington, SC 20036
202-429-5609 telephone / 202-872-0619 fac / www.oceanconservancy.org

PA UPDATES

PA MANDATES ELECTRONICS RECYCLING

A new electronics-recycling law (H.B. 708) mandates that makers of televisions and computers set up recycling programs to reduce the amount of hazardous waste in landfills. The manufacturers will be responsible for notifying consumers about how the programs will work and providing locations for the electronics collections. The law, similar to those in 22 other states, stipulates that in two years there will be no electronics in state landfills. Governor Rendell signed the bill into law in late November.

(By Amy Worden, Inquirer Harrisburg Bureau, Philadelphia Inquirer, 11/25/2010)

CH 102 AMENDMENTS WENT INTO EFFECT 11/19/10

PaDEP Chapter 102 Amendments went into effect November 19, 2010. The Chapter 102 (erosion and sediment control & stormwater management) regulation amendments were published in the PA Bulletin on Saturday, August 21, 2010.

The amendments place significant limitations on development and include changes to: RIPARIAN BUFFERS required from stream bank for both EV & HQ watersheds. In certain DEP designated EV & HQ watersheds, developers will be required to create a forest riparian buffer.

POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLANNING – Long term operation and maintenance schedules for PCSM BMPs must be established and memorialized in the deed record. Oversight will be required by a licensed professional for the construction and implementation of all PCSM BMPs.

PERMIT APPLICATION FEES – Fees have increased to \$500+\$100/acre disturbed for a General NPDES Permit and \$1500+\$100/acre disturbed for an Individual NPDES Permit.

EFFECTIVE DATES & GRANDFATHERING – An NPDES permit application submitted prior to 11/19/10 will be exempt from the new riparian buffer requirements. PCSM plans submitted after 11/19/10 must comply with all new regulations. With the exception of riparian buffers, any PCSM measures implemented under an NPDES permit issued prior to 11/19/10, but renewed after January 1, 2013, will need to comply with the new regulations.

(Courtesy – Nave Newell, Inc. – 9/1/2010)

NEW PENNSYLVANIA LAW EXTENDS LIFE OF DEVELOPMENT APPROVALS

Development approvals often expire if actions are not taken to implement those approvals. Those actions could include filing engineered land development plans, obtaining a building permit, or even beginning or completing construction. Similarly, there is a five-year protection period for most subdivision and land development approvals from changes in governing ordinances. Allowing a development approval to expire can be fatal to a project for a host of reasons including applicability of new ordinances, and changes in political and economic condi-

tions. Managing the expiration deadlines for development approvals can be challenging in the best of times. These challenges have increased dramatically with the economic downturn. On July 6, 2010, Pennsylvania provided some relief from these challenges by adopting a new permit extension statute ("PES").

Extension Period

The PES automatically suspends the expiration date of development approvals during the "Extension Period" (i.e., January 1, 2009 – July 1, 2013). The automatic suspension applies to development approvals obtained before or during the Extension Period. Thus, even if an approval expired, the PES could breathe new life into a development approval as long as it was in effect at some time during the Extension Period. The rules are different in Philadelphia, where the suspension is not automatic. In Philadelphia, the holder of an approval must provide written notice of the intent to extend the approval under the PES and must pay a fee. The PES does not shorten the duration of any approval or preclude additional extensions.

(By George Broseman, Kaplan Stewart – Fall, 2010)

MODIFICATION OF REPORTABLE RELEASE FORM

The Federal Energy Policy Act of 2005 required all the states to track the source and cause of regulated UST releases and provide the statistical information to the public. PA DEP has complied with the Energy Policy Act and the information is published on our web site. While compiling the source/cause information for the past year, it was evident that the volume and accuracy of the information is not being accounted for. The lack of accurate information is largely due to the use of the old Reportable Release Form that does not provide for this information. A copy of the most current form with the revised Section IV to capture this information is attached. It is necessary to complete this section as accurately as possible. A copy of the current Reportable Release Form is also posted on the Storage Tank Cleanup web site www.depweb.state.pa.us/portal/server.pt/community/cleanup_program/14100

Please ensure you are using the most current versions of all forms, which can be accessed through the Storage Tanks web site at www.depweb.state.pa.us/portal/server.pt/community/storage_tanks/14098 or by contacting DEP at 717-772-5599.

PA GOVERNOR RENDELL SIGNS MORATORIUM PROTECTING SENSITIVE STATE FOREST LAND FROM FUTURE NATURAL GAS LEASES

Governor Edward G. Rendell today signed an executive order protecting Pennsylvania's state forests from any new natural gas development activities that would disturb the surface of these areas and jeopardize fragile ecosystems.

The Governor said a recent and extensive evaluation of the state forest system conducted by the Department of Conservation and Natural

PA UPDATES

- Chapter 102 Amendments, pg. 13
- State Lands Gas Drilling Moratorium, pg.13
- Reportable Releases - New Form, pg. 13

Resources over a period of seven months found that any additional leases could endanger the environmental quality and character of these tracts and pose a risk to Pennsylvania's existing certification that it manages its forests in a sustainable manner, which is important for the state's nearly \$6 billion forest products industry.

Governor Rendell added the executive order was necessary now given the state Senate's failure to act on House Bill 2235, which would have instituted a moratorium on state forest land leases. The legislation passed the House of Representatives with bipartisan support in early May, but was ignored by the Senate.

"Drilling companies' rush to grab private lands across the state has left few areas untouched by this widespread industrial activity," said Governor Rendell. "We need to protect our unleased public lands from this rush because they are the most significant tracts of undisturbed forest remaining in the state. The House led the way to protect these lands, but the Senate failed to do so. That's why it's clear we need this executive order."

"Failing to protect these acres will significantly alter the ecological integrity and the wild character of our state forest system. That would devastate our ecotourism industry and jeopardize the green certification upon which the state's forest products industry depends."

Currently, 700,000 acres of Pennsylvania's 2.2 million-acre state forest are available for natural gas extraction. When completely developed over the next 30 years, these leased lands will include about 1,000 well pads and as many as 10,000 wells, which, along with the associated roadways and infrastructure, could disturb as much as 30,000 acres of the land already under lease.

Approximately 1.5 million acres of state forest lands sits atop the natural gas-rich Marcellus Shale formation. The remaining 800,000 acres that have not been made available for natural gas development contain significant environmental, eco-tourism, and recreational values, including:

- 180,000 acres of high-value ecosystems designated as wild and natural areas;
- 200,000 acres of old-growth forests;
- 128,000 acres with sensitive environmental resources (wetlands, riparian areas, threatened and endangered species, steep slopes, unique habitats) and valuable recreational resources (scenic vistas and viewsheds, trails, leased camps);
- 299,000 acres in remote areas generally inaccessible by motorized vehicles and offering wilderness experiences paralleling those in the western United States;
- 88,000 acres of highly valued recreational and water resources in the Poconos in close proximity to many residents; and
- 20,000 acres important to ecotourism in the Laurel Highlands region.

(DEP – 11/1/2010)

FEDERAL REGISTER NOTICES

<http://www.epagov/homepage/fedrgstr>

Environmental Protection Agency; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulates Matter and Ozone; Proposed Rule	<i>(Federal Register – 8/2/2010)</i>
Environmental Protection Agency; TSCA Inventory Update Reporting Modifications; Proposed Rule	<i>(Federal Register – 8/13/2010)</i>
Environmental Protection Agency; EPA's Denial of the Petitions to Reconsider the Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule	<i>(Federal Register – 8/13/2010)</i>
Environmental Protection Agency; National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants; Final Rule	<i>(Federal Register – 9/9/2010)</i>
Department of Transportation; Pipeline and Hazardous Materials Safety Administration; Notice of Proposed Rule	<i>(Federal Register – 9/17/2010)</i>
Environmental Protection Agency; New use Rules on certain Chemical Substances; Direct Final Rule	<i>(Federal Register – 9/20/2010)</i>
Environmental Protection Agency; Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; Analysis and Sampling Procedures; Proposed Rule	<i>(Federal Register – 9/23/2010)</i>
Federal Railroad Administration; Emergency Escape Breathing Apparatus Standards; Notice of Proposed Rule	<i>(Federal Register – 10/5/2010)</i>
Environmental Protection Agency; Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources; Sewer Sludge Incineration Units; Proposed Rule	<i>(Federal Register – 10/14/2010)</i>
Federal Trade Commission; Guides for the Use of Environmental Marketing Claims; Proposed Rule	<i>(Federal Register – 10/15/2010)</i>
Mine Safety and Health Administration; Lowering Miner's Exposure to Respirable Coal Mine Dust, Including Continuous Personal Dust Monitors; Proposed Rule	<i>(Federal Register – 10/19/2010)</i>
Environmental Protection Agency; National Emission Standards for Hazardous Air Pollutant Emissions; Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks; Group I Polymers and Resins; Marine Tank Vessel Loading Operations; Pharmaceuticals Production; The Printing and Publishing Industry; and Steel Pickling – HC1 Process Facilities and Hydrochloric Acid Regeneration Plants; Proposed Rule	<i>(Federal Register – 10/21/2010)</i>
Department of Transportation; Pipeline Safety: Updates to Pipeline and Liquefied Natural Gas Reporting Requirements; Final Rule	<i>(Federal Register – 11/26/2010)</i>
Environmental Protection Agency; Addition of National Toxicology Program Carcinogens; Community Right-to-Know Toxic Chemical Release Reporting; Final Rule	<i>(Federal Register – 11/26/2010)</i>

GROUP CALLS FOR DATABASE ON IAQ- RELATED ILLNESSES *(continued from page 1)*

A new research paper has been released that discusses “the current state of the science regarding human health effects acquired following exposure to the multiple microbes and microbial contaminants and their metabolites found in the interior environment of water-damaged buildings (WDB).”

These contaminants include fungi, bacteria, actinomycetes, and mycobacteria and their toxins; as well as inflammagens from fragments of fungal structures; and beta glucans, mannans, hemolysins, proteinases, spirocyclic drimanes and microbial volatile organic compounds (VOCs).

Several similar consensus statements have been composed in the past decade. Yet none have included assessments made by physicians involved with diagnosis and treatment of these adverse health effects; academic papers written by physician reporting both baseline and treatment data on the human illness, reporting of results from published studies using treatment protocols or studies on prospective human or animal experimentation, an reporting based on objective parameters found in affected patients.

Despite these substantial shortcomings of pertinent information, there prior consensus

statements are being used in legal matters to report the state of human health effects from exposure in WDB and to serve as the basis for public health policy, the advocate say.

As identified by the Government Accountability Office and the World Health Organization report, there are many compounds, both toxigens and inflammagens, present in the indoor air of a WDB that have been identified within the complex mixture found in the air and in the dust of the interior environment of a WDB.

Further, there is clear data showing that each of these compounds can initiate an inflammatory host response such that no single compound can be identified as the doles cause of the inflammatory responses seen in affected patients.

Since many sources of inflammatory stimulus exist, some of which are synergistic, and no single causative agent within the WDB can be deemed to be solely responsible for the symptoms exhibited, the sole causative agent becomes the interior environment of the WDB itself.

“It is our consensus opinion that this syndrome acquired after exposure to water damaged buildings with evidence of amplification of microbial growth shall be referred to as,

‘Chronic Inflammatory Response Syndrome [CIRS] acquired following exposure to the interior environment of Water-Damaged Buildings,’ the group concludes.

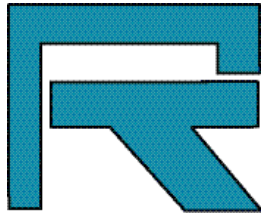
CIRS-WDB is a multisystem, multisymptom illness acquired following exposure to the interior environment of the WDB and it exists as a recognizable syndrome. When defined by exposure, symptom evaluation and epidemiologic similarities between studies of similar hosts and similar exposures, CIRS-WDB is both identifiable and treatable. A proven and consistent pattern of symptoms is demonstrated among published research findings involving both animal and human studies.

CIRS-WDB is identified as immunologic in origin, with differential inflammatory responses seen according to (a) genetic susceptibility and (b) unique aspects of host innate immune responses. Direct effects of microbial toxins, particularly mycotoxins, in pathogenesis are recognized to act synergistically with those toxins made by actinomycetes, gram negative bacteria, and possibly mycobacteria causing the effects shown in CIRS-WDB.

(Indoor Environment Connections-9/10)

PENNSYLVANIA BULLETIN NOTICES

Proposed Rulemaking – Delaware River Basin Commission – Amendments to the Water Quality Regulations, Water Code and Comprehensive Plan to Update Water Quality Criteria for Toxic Pollutants in the Delaware Estuary and Extend These Criteria to Delaware Bay	July 31, 2010
Draft Guidance – Draft – Mining Contract operator Approval	July 31, 2010
Notices –Permit Extensions Law (Act 46); Notice Applicability Department of Environmental Protection	August 7, 2010
Interim Final Guidance – Management of Fill – Interim Final Modification	August 7, 2010
Notices – Extension of Pennsylvania National Pollutant Discharge Elimination System (NPDES) Stormwater Discharges from Municipal Separate Storm Sewer System (MS4s) General Permit (PAG-13) – Department of Environmental Protection	August 14, 2010
Notices – Final Technical Guidance – Minor Revision – Management Plan for the Bureau of Water Standards and Facility Regulation	August 14, 2010
Rules and Regulations – DEP Wastewater Treatment Requirements of Total Dissolved Solids (TDS)	August 21, 2010
Rules and Regulations – DEP Erosion and Sediment Control and Stormwater Management	August 21, 2010
DEP Notices – Wastewater Treatment Requirements; Notice of Availability of Statement of Policy	August 21, 2010
Proposed Rulemaking – DEP Noncoal Mining Fees	August 28, 2010
Notice of Intent to Rescind – Policy for Conducting Technical Reviews of Water Quality Management	August 28, 2010
Intent to Rescind – Policy for Conducting Technical Reviews of Water Quality Management (Part II) Permit Applications	August 28, 2010
Intent to Rescind – PADWIS Reporting	September 4, 2010
Intent to Rescind – Pennsylvania Drinking Water Information System (PADWIS) Violation and Enforcement User's Manual	September 4, 2010
Rules and Regulations – DEP Large Appliance and Metal Furniture Surface Coating Processes	September 11, 2010
Rules and Regulations – DEP Erosion and Sediment Control and Stormwater Management Riparian Buffer Requirements	September 18, 2010
Notices – DEP Control Measures Under Consideration by the Ozone Transport Commission; Public Comment	September 25, 2010
Rules and Regulations – DEP Administration of the Water and Wastewater Systems Operators' Certification Program	September 25, 2010
Rules and Regulations – Dep Outdoor Wood-Fired Boilers	October 2, 2010
Notices – Draft Technical Guidance Substantive Revision – Guidance for Filter Plant Performance Evaluations	October 2,2010
Rules and Regulations – DEP National Pollutant Discharge Elimination System (NPDES) Permitting, Monitoring, and Compliance	October 9, 2010
Rules and Regulations – DEP Water Quality Standards Implementation	October 9, 2010
Notices – DEP Proposed Revision to Pennsylvania's State Implementation Plan for Regional Haze, Including 2008 Allegheny County Health Department	October 9, 2010
Final Guidance –Guidelines for Conducting Underground Storage Tank Facility Operations Inspections	October 16, 2010
Final Guidance – Underground Storage Tank Class A and Class B Operator Training	October 16, 2010
Notices – DEP General Permit for Short-Term Construction Projects; BMR-GP-103 Modifications	October 23, 2010
Final Guidance – Mining Contract Operator Approval	October 30, 2010
Draft Guidance – Guidance for Application of Regional Civil Assessment Procedure	October 30, 2010
Final Guidance – Policy for the Evaluation of Impacts of Oil and Gas Development on State Parks and State Forests	November 6, 2010
Rescission Guidance – Secretary's Directive on Review of Existing Regulations and Technical Guidance Documents	November 6, 2010
Rescission Guidance – Interim Public Access to Information Policy	November 6, 2010
Rules and Regulations – DEP Standards for Contaminants; Mercury Emissions	November 13, 2010
Rules and Regulations – DEP Administration of the Uniform Environmental Covenants Act – Fees	November 20, 2010
Rules and Regulations – DEP Paper, Film and Foil Surface Coating Processes	November 20, 2010
Final Technical Guidance – Riparian Forest Buffer Guidance	November 27, 2010



KEY HIGHLIGHTS

FEDERAL UPDATES

- Lead in Ammunition, pg. 4
- New DOT Rules, pg. 4
- Coal Ash TRI Reporting, pg. 6
- Conductivity Limits, pg. 6

NJ UPDATES

- Pinelands Beetle Damage, pg. 9
- LSRP-DEP Consultation, pg. 10
- Public Access Rules, pg. 10
- EPH Guidance Update, pg. 10

PA UPDATES

- Chapter 102 Amendments, pg. 13
- State Lands Gas Drilling Moratorium, pg. 13
- Reportable Releases - New Form, pg. 13

TECHNOLOGY UPDATES

- Hudson River Cleanup, pg. 7
- Nitrogen in Ecosystems from Humans, pg. 8
- Mercury in Flooring, pg. 8
- Engine Friction Wastes Energy, pg. 8

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ELECTRICITY GRID RELIABILITY
Page 1

IAQ RELATED ILLNESSES DATABASE
Page 1

RT'S OFFICE ON THE NATIONAL ROAD
Page 3

EPA ON VAPOR INTRUSION
Page 4

SAN DIEGO STORMWATER STUDY
Page 9

LITTLE TINICUM ISLAND CLEANUP
Page 12

PA ELECTRONICS RECYCLING
Page 13