



RTENV.COM

The RT Review

Providing Timely, Practical and Effective
Environmental and Energy Services Since 1988

**SUPERSTAR OF NATURAL GAS:
WITH THE MARCELLUS
SHALES, PA IS BECOMING A
RESPONSIBLE ENERGY CAPITAL**

Recent reports from Standard & Poor's and ITG Investment Research show the amount of recoverable gas in the Marcellus Shale play may be much greater than any previous government estimate. This is good news. Real American energy security and a real force in American job growth are available to us right now - if we continue to make the right decisions to obtain and use what we have right here.

Both studies confirm that Pennsylvania's Marcellus Shale formation is the global superstar of natural gas formations. The Marcellus Shale will help make Pennsylvania the energy capital of the nation and spark the rebirth of our petrochemical and manufacturing base.

Production from Marcellus wells is exceeding expectations, and some of the wells are among the most productive in the world. We already have 240,000 jobs related to our oil and natural gas extraction activities. When it comes to production numbers, Standard & Poor's own words confirm that this is a "mere drop in the bucket" of the Marcellus' full potential.

These reports also say the potential natural gas liquids recoverable from the Marcellus are proportionally higher than any other shale gas formation. This is terrific news for Pennsylvania, validating Royal Dutch Shell's announcement that it is exploring the construction of an ethane cracker facility in Beaver County, a project that would account for 10,000 jobs in the construction phase alone.

Also reported is a dramatic and historic change in the direction of natural gas flows in America. Flows have always been from the west or southwest United States to the east. Not anymore. Pennsylvania became a natural gas exporter in 2010 and is perfectly located to be the supplier to the tremendous

(continued on page 3)

IS CNG VEHICLE MANIA AHEAD? 28% GREENHOUSE GAS REDUCTION

At September's Philadelphia Marcellus Shale conference, for which RT was a sponsor, a senior Chrysler official spoke on a CNG (compressed natural gas) fueled Ram 2500 4x4 Pickup.

On October 30, at the behest of the gas industry and other potential fleet customers, Chrysler's Ram Truck division began building a pickup powered by compressed natural gas (CNG). This heavy-duty Ram 2500 4x4 Longbed thus became America's only factory-built CNG pickup.

Honda, which lays claim to this country's only factory-assembled CNG pleasure car, the Civic GX, greatly expanded that vehicle's sales arena for the 2012 model year. Available previously in only a handful of states, the GX can now be purchased at 197 dealerships in 36 states.

These developments at Ram Truck and Honda could well be the harbingers of a significant growth in the use of CNG vehicles in this country. The fact is, CNG is a much cheaper, cleaner way to run our cars and trucks than gasoline. Indeed, the upward trend in gasoline prices (never mind the current temporary dip) coupled with the price-depressing glut of natural gas has made CNG 30 percent to 40 percent cheaper. That's a reduction of about \$1.25 per gallon equivalent of gasoline.

The environmental impact is even more dramatic. When CNG is burned instead of gasoline, greenhouse gases come down 28 percent, according to the California Air Resources Board. Chrysler vice president Robert E. Lee, head of engine engineering, added that "CNG demonstrates a reduction of 70 to 90 percent of smog-producing pollutants." Reduction in overall emissions, including nasties like nitrous oxides and carbon monoxide, are also significant.

There are incentives to buy natural gas vehicles. Honda, in partnership with Clean

Energy Fuels Corp., America's largest owner of public CNG fueling stations, is offering Civic GX buyers a \$3,000 debit card that can be used at Clean Energy's stations. Also, Pennsylvania's Department of Environmental Protection offers a \$1,000 rebate to residents who purchase a new CNG vehicle.

There are CNG cons, too. Automakers generally build CNG vehicles by converting conventional gasoline cars to run on either fuel. This "bi-fuel" conversion adds to the vehicle's practicality - but also to its cost. The conversion tacks \$5,650 to the cost of the Civic GX, and \$11,000 on the big Ram pickup's sticker. (Chrysler spokesman Nick Cappa points out that if you drive the truck 15,000 to 20,000 miles a year, the CNG option will pay for itself in three years.) The CNG tanks take up cargo space and the CNG tanks add weight to the vehicle.

The other con is current refueling infrastructure. The United States, whose CNG fleet size is 11th worldwide, lags in refueling stations. Argentina, for example, has about 2,000 stations. We have about 1,500 of which half are open to the public. (There are eight in the Philadelphia area.) The number of stations is growing, however, and home fueling pumps are available for people with gas service.

Virtually any gasoline vehicle can be converted to bi-fuel, and such conversions, prevalent in such countries as Germany, Brazil and Argentina, are available here.

(continued on page 3)

TABLE OF CONTENTS

Staff and Project News	2
Federal Regulatory Updates	4-7
PA Updates	8-9
Technology Updates	10-12
NJ Updates	13-14
Energy Updates	15-16

DIRECTORY

Corporate Headquarters

215 West Church Road
King of Prussia, PA 19406
Phone: (610) 265-1510
FAX: (610) 265-0687

E-mail: RTENV@AOL.COM

World Wide Web: HTTP://RTENV.COM

24 HOUR URGENT LINE SERVICE 800-725-0593

Gary Brown, P.E., President
Phone: (610) 768-0232

E-mail: GBROWN@RTENV.COM

Craig Herr, P.G.
Phone: (610) 265-1510 Ext. 215
Hydrogeology Group Manager
E-mail: CHERR@RTENV.COM

Walter Hungarter
Phone: (610) 265-1510 Ext. 238
General Manager

E-mail: WHUNGARTER@RTENV.COM

New Jersey

Glennon C. Graham, Jr., P.G.
Phone: (856) 467-2276 Ext. 122
E-mail: GGRAHAM@RTENV.COM
Suite 306, Pureland Complex
510 Heron Drive, P.O. Box 521
Bridgeport, NJ 08014
Phone: (856) 467-2276
FAX: (856) 467-3476

Southwest Pennsylvania

Justin Lauterbach
E-mail: JLAUTERBACH@RTENV.COM
591 East Maiden Street
Washington, PA 15301
Phone: (724) 206-0348
FAX: (724) 206-0380

Regional Partners

Massachusetts

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

Michigan

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

North Carolina

Phil Rahn
Phone: (336) 852-5003

RT STAFF AND PROJECT NEWS

Justin Lauterbach and Chrissie Lee are busy on a former steel production Act 2 Land Recycling Project in Aliquippa, northwest of Pittsburgh on the Ohio River. The former steel site is expected to be a major part of the Pittsburgh area redevelopment activities, as RT's client reports many companies are interested in the location which has rail and barge access, and is close to the planned cracker facility which has received much public attention.

Josh Hagadorn and Gary Brown have been working through the fall on closure of the landfill at the former Ingersoll Rand plant, in Phillipsburg, New Jersey. Gary has also been retained as Licensed Site Remediation Professional for foundry sand capping in an area near the landfill, and, for completing biennial certifications for two other large site areas, where remediation by capping has been completed. The Town of Phillipsburg is becoming the lead agency to redevelop the site, in 2013 and beyond.

Gary Brown attended a meeting on behalf of a Pittsburgh client at Ohio EPA headquarters in Columbus, Ohio, to discuss the future of a recently purchased steel plant, which is also being considered for Marcellus Shale residuals management, given the availability of infrastructure and existing facilities present at the site.

Walter Hungarter was beginning work on a plan for management of materials during the next phase of Interstate 95 reconstruction, along with the Philadelphia waterfront.

Lisa Mascara is ramping up marketing and business development activities, for RT Energy Service Group, which was launched on December 1st. We have assembled a "deep bench" full service team, to service the Marcellus Shale drilling, midstream and transmission industries, with single source responsibility.

Jacci Evans, Kristen Foldes, and Glenn Graham, are working with Gary Brown, and, Bill Lindner of NJDEP, for large scale redevelopment and remediation

planning, in Gloucester City's Southport Development Area. High level focus on the Southport area by NJDEP, after in-depth investigation of former industrial sites by RT, is setting the stage for redevelopment of Southport, situated right on the Delaware River, in a section where there is naturally deep water due to a curve in the River. This is expected to set the stage for redevelopment with port or other uses as the economy improves.

Jeff Humpton and Larry Bily were evaluating a site planned to be used in the future for a heavy construction equipment training and demonstration facility, near Shippensburg, PA. RT has completed a number of environmental tasks at the site, including noise and soils evaluations.

Tony Alessandrini was working on a residential mold project near Harrisburg, following Gary Brown's work to minimize improper "neighbor" surface runoff and subsequent moisture intrusion at a residence. When alternaria was found to be a problem, the residents who had experienced symptoms relocated, and health concerns were promptly eased.

Craig Herr is evaluating remediation options for an Act 2 site along the Philadelphia Riverfront, which is currently under evaluation for casino redevelopment.

For a project in Atlantic City, the Atlantic Cape Community College announced addition of hospitality facilities, for training of casino workers. As the new building location is the site of a former service station, Gary Brown was retained as LSRP so that appropriate measures are included in building construction, to preclude any soil vapor concerns.

RT exceeded its business goals in 2012, with all three of our offices contributing to our success. We greatly appreciate the many opportunities that our clients continue to give us, and look forward to being of service in 2013 and beyond.

-Gary Brown

Articles in the RT Review are for informational purposes only and may not be reused without the permission of the original author; as such articles do not constitute engineering or legal advice.

IS CNG VEHICLE MANIA AHEAD? 28% GREENHOUSE GAS REDUCTION *(continued from page 1)*

Mr. Haas' article provides focus on a major area of expected environmental improvement, which will help the United States, as well as its economy, for many decades and/or many generations to come. All indications are that there will be major reductions in greenhouse gases, as a result of increasing use of clean natural gas, and decades upon decades of regulations out of Washington aimed at tailpipe emissions, can perhaps receive less attention, as ongoing

change from oil petroleum gasoline fuels to natural gas, naturally provides cleaner combustion in each and every vehicle, and lower greenhouse gas emissions. The intensity of the use of cars in cities in the United States, as compared to other cities around the world where there is increased mass transit availability, has made further gains in air quality in the United States hard and more and more expensive to attain, but now we have a big clean air opportunity.

The use of natural gas in vehicles, due to the very large number of vehicles driven in the United States every day, offers the promise of energy efficiency, and cleaner air, on a scale that has never been seen before since passage of the Clean Air Act, something all Americans should look forward to.

(By Al Haas, Philadelphia Inquirer, 11/25/12, comments by Gary Brown

SUPERSTAR OF NATURAL GAS: WITH THE MARCELLUS SHALE, PA. IS BECOMING A RESPONSIBLE ENERGY CAPITAL *(continued from page 1)*

growth markets of the northeastern United States.

This new energy revolution is also being seen in Philadelphia. Refineries that were just recently pronounced dead have new life -- in no small part because of hydraulically fractured, domestic oil and natural gas. The result is thousands of jobs and cleaner air from the use of natural gas and lower-sulfur domestic Bakken crude oil at the refineries.

(By Michael Krancer and Patrick Hendershew/Post Gazette - 11/20/2012, comments by Justin Lauberbach)

Pennsylvania has been recognized by numerous organizations, politicians, and industry figureheads as being on the forefront of this natural gas "revolution." Some

have suggested that natural gas may be the only thing that is currently keeping our country out of a recession. Although a few special interest groups may be hesitant to admit it, the positive impacts and economic benefits of natural gas have far outweighed the negatives. And it is not only the energy industry that is benefitting -- natural gas has provided an alternative for other industries, especially in the manufacturing of plastics, chemicals, and countless other products.

And from an environmental perspective, natural gas is helping America develop clean energy sources. Electric utilities utilize natural gas to generate clean power. As far as pollution is concerned, the major issue seems to have been injection of chemicals involved in fracking and the

disposal of that frack water. Studies are showing that pollution related to gas drilling is limited, and even more so since gas companies have ceased disposing of their wastewater in plants which discharge into rivers and streams. The biggest issue has not been the introduction of foreign chemicals, but rather the influx of naturally occurring salty bromides, which when combined with other chemicals such as chlorine can cause public health problems. However, the industry has seen a significant decline in elevated salty bromide levels over the past year as the gas companies are conducting their drilling in a more and more responsible manner. The facts seem to show that natural gas is here to stay and the adverse health risks seem to be dwindling.

RT JOINS MARCELLUS SHALE COALITION

The Marcellus Shale Coalition is an organization founded in 2008 under a directive from DEP Secretary, Kathleen McGinty. The industry was in its infancy and without leadership in the Appalachian region. It was at a summit with the leaders in the gas industry and the message to them was very simple. "Do this right". With that, leaders in the field formed the MSC. The primary goal has been to bridge the gap between industry and the DEP. The organization is at the forefront of the all Marcellus Shale activities. Efforts include, implementing a grassroots outreach campaign, education programs, environmental research, collaboration between industry and policymakers, among many others.

Since its inception, the organization has grown to over 250 members. It continues lead the industry and encourage collaborative work environments for all levels of the drilling and delivery process. It offers annual meetings, networking events, and multiple committees that allow members to work together and share ideas.

In July of 2012, RT joined the Marcellus Shale Coalition. September 20, 2012 was the annual Shale Insight Conference in Philadelphia. Gary Brown and Lisa Mascara attended. The event was well attended by over 150 exhibitors, and featured speeches and remarks from industry executives such as MarkWest Energy Partners Chairman and CEO Frank M. Semple, Range Resources Executive Chairman and Director John H. Pinkerton, and XTO Energy President Jack Williams.

XTO President Jack Williams believes our supply of natural gas is sufficient for the US to become a net exporter of the fuel if we expand our liquefied processing capacity. Williams also said that shale gas-development "is expected to support 1.5 million jobs in the country and contribute nearly \$200 billion to the national gross domestic product by 2015."

Key government officials also spoke, including Gov. Tom Corbett, Mayor Michael Nutter and others. According to Gov. Tom Corbett, nearly 240,000 Pennsylvanians are employed in the natural-gas industry or ancillary businesses. In addition, statistics show that jobs within the natural-gas industry in PA typically pay \$30,000 per year more than the average earned by other workers in Pennsylvania

Additionally, longtime newsman Ted Koppel moderated a panel featuring top energy surrogates from the Obama and Romney presidential campaigns.

As RT continues to expand in this industry, we have created a Service Group that is dedicated to the needs of Marcellus shale industry. RT Energy Services. The Group will be headed up by Justin Lauterbach with Lisa Mascara as the key industry contact and will operate out of the southwestern PA office in Washington, PA. Services will be tailored to meet the needs of the Marcellus Shale industry and include drilling, pipeline permitting, wetland delineation, Act 2 services, SPCC plans, and NPDES permit applications.

By Lisa Mascara

FEDERAL REGULATORY UPDATES

EPA WORKS TO COORDINATE POWER PLANT WATER DISCHARGE, COAL ASH RULES

EPA officials are attempting to coordinate “as much as we possibly can” forthcoming rules governing coal ash disposal and wastewater discharges from the power sector, a key concern for industry as attention shifts from a suite of air rules for the sector to the looming waste and wastewater rules.

Agency officials say that coordinating the measures aims to reduce duplicative and perhaps contrary requirements given that the regulations govern related waste streams. “There is an obvious nexus” between addressing waste from coal plants whether it is in a coal ash pond or in the wastewater discharge of a plant, Julie Hewitt, an official in EPA’s Office of Water (OW), told Inside EPA on the sidelines of the *National Association of Regulatory Utility Commissioners’ (NARUC)* conference November 13 in Baltimore.

She said officials in OW and the Office of Solid Waste and Emergency Response (OSWER) “have talked a fair bit and tried to coordinate as much as we possibly can” efforts to revise the agency’s power plant effluent limitation guideline (ELG) and the coal combustion residuals (CCR) disposal rule.

Agency officials are also pointing to the need to coordinate the rules in opposing environmentalists’ call for the U.S. District Court for the District of Columbia to set a fixed six-month deadline to finalize the CCR rule.

“EPA does not believe that the schedule proposed by environmental plaintiffs would allow EPA to effectively coordinate these rules to minimize difficulties for facility implementation,” OSWER official Suzanne Rudzinski said in an October 11 declaration to the court.

The two pending rules are expected to tamp down on high levels of contaminants in effluent discharges and coal ash given that those concentrations are expected to increase due to installation emissions controls required under the Clean Air Act.

The Clean Water Act (CWA) ELG will revise discharge standards for coal- and gas-fired power plants for the first time since 1982 – a revision that is expected to include limits for flue gas desulfurization units, more commonly known as “scrubbers, which have been installed on many coal-fired power plants to reduce sulfur dioxide and other pollutants.

EPA is also still weighing a pending final rule to regulate CCRs either as hazardous waste under subtitle C, or as solid waste under subtitle D of the Resource Conservation & Recovery Act (RCRA).

But the regulations are a growing concern for industry. At the NARUC conference, Jeff Burleson of Southern Company included the ELG and the CCR rule along with the utility air

toxics rule, a pending cooling water intake structure and potential greenhouse gas (CHG) rules for existing power plants as the key rules that could drive substantial costs for industry in the coming years.

With the exception of the CHG rules, Burleson estimated that the cost to comply could be up to \$2,000 per kilowatt, with a capital outlay of between \$13 billion and \$18 billion and potential rate increases of between 10 and 20 percent. That cost, Burleson noted, came despite Southern revising downward by \$900 million its projections on how much the utility air toxics rule would cost. Despite the drop, he said the remaining rules are still expected to be very costly and remain within the \$13-\$18 billion range, assuming that EPA finalized a non-hazardous coal ash rule.

While industry groups are concerned about the costs of implementing the pending regulations, the timing of both rules is still uncertain. While EPA has agreed, in a settlement with environmentalists, to propose revisions to its ELG by December 14, industry groups have appealed the suit in an effort to intervene in the settlement. Oral arguments in the case, *Defenders of Wildlife, et al. v. EPA*, were set for December 5.

On coal ash, EPA proposed RCRA disposal rules for the waste in 2010 but is yet to promulgate a final rule, saying it needs until 2014. Environmentalists and the coal ash recycling industry are suing to set a date-certain deadline, thought EPA officials warn that a hard deadline would hurt both the CCR rule as well as the ELG, one of the first clear signs from the agency that it is coordinating the two rules.

(*SUPERFUND REPORT – November 26, 2012*)

MOST US WATERS ARE GETTING DIRTIER

The Clean Water Act was signed into law forty years ago on October 18, 1972. This year, EPA released a new database (called How’s My Waterway?) displaying the conditions of streams, lakes, estuaries, wetlands and other water-bodies across the country. These overall figures are distressing:

More than three-quarters (81%) of US coastal waters are impaired, as are two-thirds (66%) of our bays and estuaries and more than half (51%) of near coastal ocean waters. More than two-thirds (69%) of our lakes, reservoirs and ponds are impaired as are virtually all of the Great Lakes shorelines (98%) and waters (100%). More than four-fifths (84%) of the nation’s wetlands are also impaired

The best results recorded by EPA were still pretty dismal: less than half (46%) of rivers and streams are in good shape, meaning they fully support their designated uses. However, these EPA numbers are likely dramatic underestimates because:

The EPA figures are based on assessed waters but only 27% of rivers and streams, for example,

FEDERAL UPDATES

- Coal Power Plant Rules, pg. 4
- PCB Rule Interpretation, pg. 16

have been assessed as have only 1% of wetlands. Reporting states often skew the methodology of assessments to mask problems

Figures do not include many of the new, emerging chemicals, many of which are damaging to aquatic life but for which there are no pollution standards

“After 40 years of the Clean Water Act, our rivers may look better and may be less likely to catch on fire but the true quality of our waters may be regressing,” stated PEER Executive Director Jeff Ruch, referring to Ohio’s Cuyahoga River catching on fire in 1969, an incident which helped spark enactment of national water pollution controls. “The Clean Water Act’s promise that our waters be drinkable, swimmable, and fishable remains largely unfulfilled.”

(*Environmental Resource Center – 11/5/2012*)

QUIGLEY WEIGHING OPTIONS ON ARMY CORPS MULTI-PARTY FUDS POLICY

An Illinois congressman is continuing to monitor the Army Corps of Engineer’s policy of retracting itself from the cleanup of contaminated multi-party formerly used defense sites (FUDS) and relying on the Justice Department (DOJ) to cash out any of its cleanup liabilities, with the lawmaker weighing his options following DOJ’s recent response to him generally deflecting the issue to other departments.

At issue is a months-long probe by Rep. Mike Quigley (D-IL) to get various federal departments – the Treasury Department, DOJ, the Army Corps and EPA – to explain the legal basis for using the Treasury Department-administered Judgment Fund to cash out the Corps’ share of the cleanup liability under the Comprehensive Environmental Response, Compensation & Liability Act (CERCLA) at multi-party FUDS, rather than have the Corps lead the cleanup and use the Defense Department funds. Quigley specifically asked DOJ last May to provide its “legal interpretation of the statutory authorities” that would allow the Judgment Fund to be used for cash-out payments, and asked DOJ to examine the FUDS multi-party site list of 216 FUDS at which the Corps has said it shares cleanup liability with non-federal parties.

The Corps is responsible for overseeing cleanup at FUDS, but in recent years has established a general policy of dropping work, without notice, at FUDS in cases where it discovers other potentially responsible parties (PRPs) are viable. The Corps then turns the matter over to DOJ to determine the Corps’ share of a cash-out at the site using funds from the Treasury Department’s Judgment Fund, generally tapped by the federal

FEDERAL REGULATORY UPDATES *(Continued)*

government to pay monetary claims against the United States, which are not otherwise authorized through separate appropriations. FUDS are one-time DOD properties that were transferred out of DOD control prior to October 1986, and many were only briefly used by DOD for World War I and II efforts.

The Corps' practice, which has cropped up recently as a concern among regulators at sites in a variety of states, has particularly irked the state of Illinois, which fears a potentially significant workload increase due to the policy.

Following DOJ's recent response to Quigley, his office says the congressman is still weighing his options on how he will pursue the issue, but is not taking his eye off the matter.

In its letter, which is dated July 27 but was received by Quigley's office in September, DOJ describes the criteria that must be met to use Judgment Fund money and cites past DOJ policy that generally established the Fund can be used for paying CERCLA contribution judgment or DOJ compromise settlements. But DOJ avoids providing an opinion on whether the Fund should be used for paying the military's share at multi-party FUDS.

"[G]iven the Department of Justice's limited role in the Judgment Fund request process, we are not in a position to opine (beyond the general principles discussed above) as to whether the Judgment Fund should be used to pay the federal PRP share of CERCLA responsibility at the 216 FUDS sites in the Army Corps of Engineers' September 30, 2001 list," DOJ says in the letter to Quigley. It suggests either the Corps or Treasury Department answer that question.

The Treasury Department earlier this year also deflected Quigley's inquiry into the propriety of using the Judgment Fund to pay the Army Corps' share of cleanup liability at multi-party FUDS. The Treasury Department denied it has a significant role in making that determination, deferring to DOJ and the Corps.

(SUPERFUND REPORT – October 1, 2012)

EPA CRAFTS NEW ENFORCEMENT STRATEGY TO BOLSTER REGULATORY COMPLIANCE

EPA's enforcement chief and other agency officials are detailing a broad new strategy to improve compliance with environmental laws including emphasis on "more effective" and "simpler" rules and permitting requirements that more directly target the upstream sectors of the regulated community, bolstered by greater use of electronic reporting.

The emerging "next generation" strategy aims to boost compliance amidst what the agency officials say are growing non-compliance rates and to enhance efforts to stretch the agency's constrained enforcement budget.

"The rates of non-compliance that we see are a serious issue that tell us we need to develop new

strategies," said Cynthia Giles, assistant administrator of EPA's Office of Enforcement and Compliance Assurance (OECA), during a July 24 National Environmental Enforcement Information web-based conference, which EPA recently posted online.

For example, in state water programs with strong discharge monitoring report data, there is a fairly stable 25 percent non-compliance rate, but in other sectors where the data is not as robust, dischargers may have a rate of non-compliance of 45 percent or more, Giles told the meeting. The distinction highlights the relationship between high quality, robust data improved compliance, and is the driving focus of EPA's new enforcement strategy.

"We are not going to solve this problem through inspections and enforcement actions alone," according to Giles' comments. The next generation compliance effort will include changes to regulatory design aimed at making it easier for entities to comply with rules and permits; mandatory and widespread e-reporting; innovative enforcement approaches; increased transparency and advanced monitoring methodology of environmental releases.

"We're not achieving the health and environmental benefits from our regulations and permits due to high non-compliance," Giles said during the meeting. "This isn't a new problem, but it's growing increasingly important. Our data on non-compliance is incomplete and incomplete data is itself a problem," she said.

The effort is also driven in part by dwindling federal funds, which includes reductions to OECA's budget. The enforcement office in its draft National Program Manager guidance outlining its priorities for fiscal year 2013 detailed plans to scale back some enforcement – including criminal stormwater cases and other areas – in order to shift resources to higher priority areas, primarily due to proposed agency funding cuts.

(SUPERFUND REPORT – September 3, 2012)

STATES FRUSTRATED OVER CUMBERSOME PCB CLEANUP RULES UNDER TSCA

State environmental officials voiced frustration in October at a state waste managers' forum over the requirements imposed under the Toxic Substances Control Act (TSCA) for cleaned up polychlorinated biphenyls (PCBs) and the limited resources EPA has devoted to a program that the agency has not delegated to states.

EPA officials at the conference appeared willing to consider delegation to states, noting that EPA has not seen any prohibitions in the statute to such a transfer. But the agency was less receptive to wholesale legislative revisions—noting the significant amount of rulemaking and resources that would entail.

At the same time, states applauded EPA for its

attempts to work with the "poorly thought-out" TSCA as it applies to PCB cleanups.

The agency for the past several years has sought to incorporate PCB cleanups into the Resource Conservation & Recovery Act (RCRA) process, although the effort has been limited as PCB wastes are governed by TSCA. In 2007, EPA transferred PCB cleanups from its Office of Pollution Prevention & Toxics to the Office of Resource Conservation & Recovery (ORCR). Initially, the agency tried to make the PCB cleanup program as much like RCRA as it could, Sonya Sasseville, with ORCR, said October 19 at the Association of State & Territorial Solid Waste Management Officials (ASTSWMO annual meeting in Washington, D.C.

The agency then discovered that it is "very difficult because the regulatory structures [of TSCA and RCRA] are so different," she said. She added that "it's very difficult these days to put out new regulations or even to change guidances. But we've made some progress in those areas."

During the forum, states discussed the challenges inherent in TSCA guiding the program, in particular its forcing extensive sampling protocols.

In the case of a brownfields cleanup, "you could spend all your money sampling" as required under the PCB protocol, and yet it does not make sense to bring TSCA's requirements in when you have a state cleanup level, for example, that requires cleanup to a stringent level of 1 part per million (ppm) for PCBs, Jennifer Roberts of the Alaska Department of Environmental Conservation said during the discussion.

Steven Cobb, a regulator with the Alabama Department of Environmental Management and an ASTSWMO past president, said the discussion exemplified that while EPA has worked on streamlining the PCB cleanup program, there are still situations where once PCBs are found on a site, it brings in TSCA requirements and that "slows down" the process, creating a challenge.

Roberts applauded EPA's attempts to work with a "really poorly thought-out rule" – TSCA – "but now we have a rule that really is a barrier to getting a lot of things done." She said when TSCA was written, states lacked the maturity they have now with their cleanup rules. Now there are multiple layers of requirements. She said the Alaska commissioner has asked her: "If our cleanup number is 1 [ppm], what's EPA going to add to that?"

She told him, "It's their rule, and they get to play in the sandbox too."

The two main issues state regulators cited as problems are repetitive sampling protocols required under TSCA that for instance can deter redevelopment of brownfields, and limited resources EPA devotes to oversight of a program that is not delegated to states. The agency generally has one TSCA coordinator per region.

FEDERAL REGULATORY UPDATES (Continued)

States suggested EPA augment staff to increase those resources or delegate the program to states. (SUPERFUND REPORT – October 29, 2012)

EPA FILES APPEAL ON MINING GUIDE

EPA appealed a district court ruling that vacated its mountaintop mining guidance, which tightened up on disposal of fill and rock from mountaintop mining operations in valley fills.

EPA October 9 sent notice of the appeal of the case *National Mining Association v. Lisa Jackson et al.* to the U.S. Court of Appeals for the District of Columbia Circuit.

The case stems from a challenge of EPA's guide, "improving EPA Review of Appalachian Surface Coal Mining Operations Under the Clean Water Act (CWA), National Environmental Policy Act, and the Environmental Justice Executive Order."

Judge Reggie Walton of the U.S. District Court for the District of Columbia in July sided with arguments laid out by industry lawyers that the guidance overreaches EPA's Clean Water Act authority.

(INSIDE EPA – 10/10/12)

APPELLATE COURT WEIGHS KEY SUPERFUND LIABILITY ISSUES IN PRECEDENTIAL CASE

The U.S. Court of Appeals for the 4th Circuit is weighing whether to overturn a lower court's interpretation of a measure passed in 2002 meant to protect innocent purchasers of Superfund brownfields property from being saddled with cleanup liability, in the first case at the appellate level to address the issue as it applies to a brownfields project.

The case, *PCS Nitrogen, Inc. v. Ashley II of Charleston LLC, et al.*, also is significant as it is one of the first appellate cases addressing divisibility of harm since the Supreme Court in 2009 ruled in *Burlington Northern & Santa Fe Railway Co. v. United States* that where multiple parties cause a single harm, apportionment of the harm is possible.

The 4th Circuit was scheduled to hear oral arguments addressing both Superfund issues on December 5.

In *Ashley II*, developer Ashley is asking the appellate court to overturn a district court ruling that denied Ashley liability protection as a bona fide prospective purchaser (BFPP) under 2002 amendments to the Comprehensive Environmental Response, Compensation & Liability Act (CERCLA) that pertain to BFPPs. The measure, the Small Business Liability Relief & Brownfields Revitalization Act, is commonly referred to as the Brownfields Amendments. The U.S. District Court for the District of South Carolina in 2010 ruled Ashley failed to meet three of the eight criteria for attaining BFPP status under the brownfields law.

At the district court level, the court ruled that

Ashley failed to meet three criteria required to use the BFPP defense. Specifically, it said the three breaches were Ashley's improper affiliation with a potentially responsible party (PRP) at the site, its failure to exercise appropriate care with respect to hazardous substances found at the facility, and its failure to prove that no disposals of hazardous substances occurred on the site after its acquisition of the property.

The case is a cost recovery action at the Columbia Nitrogen Superfund site in Charleston, S.C. Ashley initially brought the case against PCS Nitrogen seeking a declaratory judgment that PCS is jointly and severally liable for the cost of remediating the 43-acre site, and seeking a money judgment of more than \$194,000 to reimburse Ashley for costs of remediation that it had incurred. PCS in turn filed contribution claims against Ashley and several other parties.

Ashley acquired most of the site in 2003 as part of a plan to develop a larger area for mixed uses. Those plans failed, and now all funds related to the disposition of the site are pledged to Ashley's lender, according to one of Ashley's briefs. When Ashley bought the property, the site's contamination was well documented, and Ashley indemnified the sellers against future environmental liability.

Past owners of the property operated various industrial facilities at the site, most notably a fertilizer plant that caused much of the pollution. In a separate aspect of the case, PCS is fighting the lower court's determination that it is a successor to one of the companies, Columbia Nitrogen Corporation (CNC), that produced fertilizer, and is therefore liable for the resulting contamination. CNC operated from 1966 to 1972, following fertilizer manufacturing operations by a separate company, Planters Fertilizer & Phosphate Company, 1906 to 1966.

Ashley in recent briefs filed to the 4th Circuit disputes that it failed to meet all eight BFPP criteria and asks the court to liberally construe the Brownfields Amendments. It warns if the lower court decision stands, "it will have a tremendous chilling effect on the entire nationwide Brownfields movement."

(SUPERFUND REPORT - October 12, 2012)

FIGHTING PUSH FOR DEADLINE, EPA INDICATES – LENGTHY DELAY FOR COAL ASH RULE

EPA indicated in October that it will need at least a year to review and take comment on recent data and unresolved concerns related to its coal ash disposal regulations.

PCB MANIFEST REVISED TO MATCH RCRA HAZARDOUS WASTE MANIFEST

The EPA has issued a direct final rule to update and clarify several sections of the Polychlorinated Biphenyl (PCB) regulations associated with the manifesting requirements,

which uses the Resource Conservation and Recovery Act (RCRA) Uniform Hazardous Waste Manifest, under the Toxic Substances Control Act (TSCA).

These changes are to match, as much as possible, the manifesting requirements for PCBs under TSCA to the manifesting requirements for hazardous waste under RCRA, of which the regulatory changes to implement the Uniform Hazardous Waste Manifest form were promulgated on March 4, 2005.

(Environmental Resource Center, 9/10/2012)

NEW LEAD PAINT GUIDELINES FROM HUD

To help ensure families protect their children from lead poisoning, the U.S. Department of Housing and Urban Development (HUD) recently announced new Guidelines on how to identify and control lead-based paint and related hazards in housing, and to help property owners, government agencies, and private contractor sharply reduce childhood exposure to lead without unnecessarily increasing the cost of renovation.

The second edition of the Guidelines replaces the 1995 edition.

The *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* support HUD's vision to reduce hazards in housing in a cost-effect manner while protecting the health of children. The Guidelines apply to lead hazard evaluation and control in all federally associated housing.

These *Guidelines* can be used by those who are required to identify and control lead paint hazards, as well as property owners, landlords, and child-care center operators. They offer helpful advice on renovations in older housing, lead-based paint inspections and risk assessments, and where to go for help. The *Guidelines* also outline what users have to do to meet requirements and recommendations; identify training – and if applicable, certification – required for people who conduct the work; and describe how the work should be done.

The *Guidelines* complement regulations that have been issued by HUD, the U.S. Environmental Protection Agency (EPA), and the Occupational Safety and Health Administration (OSHA), and policies from the Centers for Disease Control and Prevention (CDC).

Renovation Issues

"There is substantial evidence that uncontrolled housing renovation work can cause lead poisoning," the department notes in the guidelines.

One study found that refinishing activity performed in dwellings with lead-based paint was associated with an average 69 percent increase in the blood lead level of the 249 infants living there. Another study of 370 lead poisoned children found a statistically significant association between household renovation activ-

FEDERAL REGULATORY UPDATES *(Continued)*

ity and young children's blood lead levels at or above 10 ug/dL ($p < 0.0001$).

Other researchers have also reported cases where renovation activity has resulted in elevated blood levels. The costs of cleaning up a house contaminated by paint removal using uncontained power sanding can run as high as \$195,000.

(By Tom Scarlett, Indoor Environment Connections, 10/12)

DOT TO REVISE HAZARDOUS MATERIALS REGULATIONS

The Pipeline and Hazardous Materials Safety Administration is proposing to amend the Hazardous Materials Regulations to incorporate provisions contained in certain widely used or longstanding special permits and certain competent authority approvals (approvals) that have established safety records. Special permits allow a company or individual to package or ship a hazardous material in a manner that varies from the regulations provided an equivalent level of safety is maintained. An approval is a written consent (document) required under an international standard (i.e., International Maritime Dangerous Goods (IMDG) Code, International Civil Aviation Organization (ICAO)), or is specifically provided for in the HMR, and is issued by the Associate Administrator for Hazardous Materials Safety. These proposed revisions are intended to provide wider access to the regulatory flexibility offered in special permits and approvals and eliminate the need for

numerous renewal requests, reducing paperwork burdens and facilitating commerce while maintaining an appropriate level of safety.

The special permits affected by the proposed rule represent variances from current regulations for:

- Limited quantities of liquids and solids containing ethyl alcohol
- Transportation of solid coal tar pitch compounds
- Transportation of certain ammonia solutions in UN1H1 and UN6HA1 drums
- Transportation of spent bleaching earth
- Requalification of non-DOT specification cylinders in life-saving appliances
- Use of regulated medical waste containers displaying alternative markings
- Incorporation of Oxygen Generator special permits to harmonize with FAA Modernization and Reform Act of 2012

This rulemaking will also address three petitions for rulemaking regarding the continued use of renewal applications for long standing special permits.

(Environmental Resource Center 10/29/2012)

COAL FIRED POWER PLANT RETIREMENTS

The Brattle Group prepared a Report on Coal Plant Retirements, in October. The energy market and emerging environmental regulation have changed substantially since 2010, when the Brattle Group completed its last Report.

On an overall basis, there has been an acceler-

ation of announcements to retire coal plants, and about 10 percent of the total coal fired power plant capacity, is now set to retire.

Conclusions of the Report are:

-The questions concerning what impact the new air quality regulations will have on power prices and resource adequacy continue to be important and difficult to answer definitively. This 2012 reassessment indicates that somewhat more retirements are likely (about 25 GW) than we foresaw in late 2010. However, that change is primarily due to changing market conditions, not environmental rule revisions, which have trended towards more lenient requirements and schedules.

- We do not envision broad area reliability problems unless gas prices fall about \$1/MMBtu or more below current forward prices and/or a very strict carbon policy were to be introduced around 2020. Nonetheless, the financial implications are substantial, such that even the most viable plants and power plant owners will have some anxiety about the riskiness of their decisions to retrofit and their ability to obtain financing for the initial expenditures. Once those are completed, however, the coal fleet should be back to being profitable much like would have occurred absent the environmental rules.

To obtain a copy of the report go to www.brattle.com

RIDLEY TOWNSHIP HOTEL REDEVELOPMENT AWARDED \$1.25 MILLION GRANT FROM THE STATE

The site at Stewart Ave. near I-95 (~20 acres in size) was the location of a former wastewater treatment plant which has been vacant for a significant number of years. The redevelopment of the site will involve two hotels, and potentially a convenience store with gasoline pumps and two restaurants.

Historic environmental investigations at the site have been completed since the wastewater treatment plant ceased operations.



Underground storage tanks with di mimis releases were removed and soils remediated in the early 1990s. PADEP approved the closure activities in that timeframe as well. The facility was subsequently decommissioned. Arsenic impact to soils resulting from the former operations was identified during due diligence investigation work in 2004 and 2005. The arsenic impacted soils were delineated by RT in 2010 and found to be isolated to a small area of the former drying beds. In 2012, the arsenic impacted soils were excavated and removed from the property. Post excavation results documented the remediation to the PADEP residential statewide health standard. RT submitted the Final Act 2 Report to PADEP in July 2012 and the Department approved the Final Report in August 2012.

The grant was funded through the PA Department of Community and Economic Development and is planned to be used for infrastructure improvements for the project (parking and lighting). It is estimated that the redevelopment will product over one million dollars of tax revenue per year and result in 131 full-time and 52 part-time jobs. It will also provide over 230 construction jobs. Work is scheduled to commence in late 2012 and be completed by the end of 2013.

Brownfield site redevelopment continues to be possible even in harder economic times so long as those involved have the patients and ingenuity to make the redevelopment work. For more information on Brownfield redevelopment contact Walter Hungarter at RT at (610) 265-1510 ext. 238.

-By Walter Hungarter

PA UPDATES

DEP ISSUES FINAL AIR AGGREGATION GUIDANCE FOR DRILLING ACTIVITIES

The PA Department of Environmental Protection (DEP) announced October 5, that the agency finalized a guidance on air quality permitting decisions for oil and gas operations. The guidance applies to permitting sources of emissions from the exploration, extraction, and production of oil and gas.

DEP published a version of the guidance for public comment last fall (November 2011 Practical Operator, page 12). The final guidance appeared in the Pennsylvania Bulletin on October 6 and discusses how DEP decides when to separately permit emission sources, such as natural gas compressor stations, and when to aggregate them.

“Our guidance provides a common-sense approach to air aggregation, also known as a single-source determinations, based on existing law,” said DEP Secretary Michael Krancer. “Recently, the U.S. Environmental Protection Agency’s misuse of the aggregation test for natural gas exploration, extraction and production earned the EPA a sharply worded rebuke from the Sixth Circuit Court of Appeals.

“The court’s opinion in *Summit Petroleum v. EPA*, which dealt with the aggregation of separate natural gas facilities in Michigan, made very clear that Pennsylvania’s approach is the correct interpretation and application of the law,” he said. “The *Summit Petroleum* court’s decision characterized EPA’s interpretation as ‘unreasonable’ and ‘inconsistent’ with the regulatory history that established the regulatory test.”

“Our air quality program will use a practical, common-sense and legally sound approach as it makes aggregation determinations on a case-by-case basis, weighing all of the factors the law provides,” Krancer said. “We in Pennsylvania have a lengthy and successful history of regulating the oil and gas industry, and we are ensuring that this state and this country realize the full promise of abundant, domestic, cheap, clean-burning natural gas extracted and brought to market in an environmentally sensitive manner.”

In the coming months DEP will also announce a revised general permit for oil and gas compressor stations, which authorizes the operation of minor emission sources.

(PIOGA Press – 10/12)

DEP FINALIZES PERMIT DECISION GUARANTEE POLICY

In a move that could significantly alter environmental permitting approaches across Pennsylvania, on November 2, 2012, the Pennsylvania Department of Environmental Protection (DEP) announced that it has finalized its new Permit Decision Guarantee policy. This

policy establishes a new permitting process starting November 14, 2012, that is intended to reward applicants who spend time and resources submitting what DEP considers to be high quality applications for projects with verifiable, positive economic impacts, while significantly extending review times and adding procedures for applications that fail to meet established legal or technical standards in the initial application. Through these new procedures, the Permit Decision Guarantee policy places greater emphasis on submitting high quality applications in the first instance and positioning those applications in a way to take full advantage of the streamlined review procedures and review hierarchy established by the policy.

The Permit Decision Guarantee policy applies to over 240 types of environmental permits issued by each of DEP’s four major program offices and provides a corresponding “Permit Decision Guarantee timeframe” for each permit by which DEP is supposed to complete its review. The new policy also applies to local agencies, such as County Conservation Districts and County Health Departments, that have been delegated authority to issue any of the permits subject to the policy. Importantly, the Permit Decision Guarantee policy does not affect approval timeframes and frameworks established by statute or regulation. For example, approvals associated with cleanups pursued under Pennsylvania’s Act 2 Land Recycling Program are not subject to the Permit Decision Guarantee policy because Act 2 establishes its own review timeframes.

As an initial step, the Permit Decision Guarantee policy strongly encourages applicants to contact DEP and arrange a pre-application conference involving any consultants or other advisors that will participate in the permit process—especially for large-scale or complex projects—going so far as to state that the Permit Decision Guarantee may be “void” if an applicant chooses to forego a pre-application conference when one has been advised by DEP.

Following the pre-application conference, the applicant must submit a “complete and technically adequate application which meets all applicable and regulatory and statutory requirements and contains all information needed by the Department to make a final permit decision.” After receiving the application DEP will undertake a “completeness review” within ten business days. If DEP finds the application to be complete, then DEP will send an initial acceptance letter and begin its “technical review” of the application. If, however, DEP finds that the application is incomplete, then DEP will deny the application, send the applicant a denial letter that sets forth DEP’s explanation including citations to specific statutory and regulatory provisions, and keep the

PA UPDATES

- Ridley Twp. Redevelopment, pg. 7
- Key PA DEP Guidance Updated, pg. 9

permit application fee. Any resubmissions after an incompleteness determination are treated as new applications.

Once DEP has found the application to be complete, the application is eligible for the Permit Decision Guarantee policy, and DEP is supposed to complete its technical review and issue or deny the permit within the specific timeframes listed in the policy. The Permit Decision Guarantee policy states that if DEP fails to meet the Permit Decision Guarantee timeframe for a complete and technically adequate application, then DEP has five additional business to approve or deny the permit. If that timeline is not met, then a meeting is scheduled with the DEP Secretary to determine why the deadline was missed.

There are a number of off-ramps, however, that could potentially remove the application from the Permit Decision Guarantee policy and associated timelines. First, applications that are found during the technical review to contain “technical deficiencies” are not eligible for the program. In this regard, DEP will apply a “two strikes” policy, meaning that applicants will have one opportunity to correct all deficiencies listed in what is supposed to be a single comprehensive deficiency letter from DEP. If the applicant fails to address the technical deficiencies to DEP’s satisfaction, then the application is brought to the applicable DEP Program Manager and Regional Director for an elevated review to determine a path forward that may include denial of the application. The policy does allow for more than one deficiency letter for certain technically complex projects and permits.

Second, while the Permit Decision Guarantee prescribes specific timelines for the technical review of environmental permits, it also recognizes that certain “ancillary activities” may delay final permit issuance beyond the listed timeframe. These include issues related to financial assurance, resolution of outstanding violations, coordination with other federal, state or municipal agencies (or even other DEP programs) and other complex technical factors including air modeling, risk assessments, or harms-benefit analyses.

In addition to providing outside timelines and procedures for DEP’s review of permit applications, the Permit Decision Guarantee policy also establishes a new hierarchy to determine which types of applications are reviewed first. The policy replaces the “first-in-first out” framework with one that, after considering permits that are necessary to address imminent or broad-based environmental issues, prioritizes those that are

PA UPDATES (Continued)

necessary for projects that can be shown to have some positive economic benefit for the Commonwealth or local communities.

Implementing the new Permit Decision Guarantee policy will undoubtedly be an iterative process for both DEP and applicants, and DEP plans to re-evaluate the policy on a quarterly basis over the next year, starting on February 2013.

(By Todd Kantorczyk – Manko Gold Katcher & Fox – 11/5/12)

DEP LAUNCHES LONG-TERM AIR STUDY IN SOUTHWESTERN PENNSYLVANIA

The Department of Environmental Protection has begun a long-term air monitoring study of Marcellus Shale development. The yearlong study in Washington County will measure ambient airborne pollutants in an effort to determine potential air quality impacts associated with the processing and transmission of unconventional natural gas.

The data from the study will allow DEP to assess any potential long-term impact of air

emissions from unconventional natural gas operations to nearby communities, and it will help DEP address the cumulative impact of the operations in the Marcellus Shale region, the agency said in a news release.

In 2010-2011, the agency conducted short-term ambient air quality sampling in the southwest, north-central and northeast parts of the state where Marcellus Shale drilling was taking place. The sampling did not identify concentrations of any compound that would likely trigger air-related health issues. DEP also tested for carbon monoxide, nitrogen dioxide, sulfur dioxide and ozone, but did not detect concentrations above National Ambient Air Quality Standards at any of the sampling sites.

The primary site of the long-term study will be downwind of the Houston gas processing plant in Chartiers Township, Washington County, where DEP will monitor for ground-level ozone, particulate matter, carbon monoxide, nitrogen oxides, hydrogen sulfide and methane. The ambient air will also be tested for more than 60 volatile organic compounds, including hazardous air pollutants, and meteorological data

will be collected continuously.

DEP will also monitor for volatile organic compounds and collect meteorological data at three additional sites in Chartiers and Hickory Townships in Washington County. Of the two additional Chartiers Township sites, one is upwind of the Houston gas processing plant, and the other is downwind of the Brighich compressor station. The site in Hickory Township will be located downwind of the Stewart compressor stations.

DEP intends to collect at least one year of data and compare those results to national ambient air quality standards, then conduct a long-term risk analysis. The Washington County results and risk analysis will aid in determining the need for any further long-term sampling in other regions of the state, the agency says.

For more information or to view the study's sampling protocol, visit www.dep.state.pa.us and click "Air," or call 717-787-9702.

(PIOGA – 8/12)

EMAIL BLAST ARCHIVES http://rtenv.com/email_blast_archive.html

Post Date	Title - Download	Description
12/07/12	RT Establishes Full Service Energy Group	As RT enters our fourth year in Southwestern PA, we have continually expanded our services to accommodate the Marcellus Shale Industry.
11/02/12	In PA General Beneficial Use Permits- Expiration Dates Extended	Pennsylvania Act 46 of 2010, and Act 87 of 2012, extended existing permit expiration dates for a number of General Beneficial Use Permits used in the asphalt industry.
10/31/12	New LBP Rule	Landlords in Philadelphia will be required to test for the presence of Lead-Based Paint (LBP), under a measure approved by the city Council starting with new leases after December 21, 2012, according to Philadelphia news reports.
10/22/12	Focused Act 2 Remediation	RT is pleased to announce 24 hour service to the Marcellus Gas industry, to assist with managing remediation when releases occur at drilling or midstream sites
10/16/12	LSRP Partnering in NJ On Roadway	The Licensed Site Remediation Professional Program was finalized on May 2, 2012, as to using a new Linear Construction Project approach, when installing utilities or constructing or reconstructing roadways in New Jersey.
10/02/12	Moldy Homes Cause Asthma in Children	Infants who live in moldy homes are three times more likely to develop asthma by age seven...

KEY UPDATES – PA DEP GUIDANCES

- Surface Mine Clean Fill Guidance – *PA Bulletin* Comment Notice expected in Late December or January.
- PNDI – Guidance – Coordination During Permit Review and Evaluation (comments were due 12/31) – 1124/12 *PA Bulletin*.
- Final NPDES General Permit for Stormwater Discharges Associated with Construction Activities (PAG-02) Published in the December 1, 2012 *Pennsylvania Bulletin* as final.
- *New Draft Guidance* – Developing National Pollutant Discharge Elimination System (NPDES) Permits for Mining Activities. *Description:* This guidance describes the procedures for establishing effluent limitations and permit conditions for NPDES permits for mine sites. Comments were due by December 24, 2012.

TECHNOLOGY UPDATES

NEW GUIDELINES FOR WATER REUSE

Water reclamation and reuse have taken on increasing importance in the water supply of communities in the US and around the world to achieve efficient resource use, ensure protection of environmental and human health, and improve water management. EPA has released the Agency's 2012 Guidelines for Water Reuse.

The 2012 reuse guidelines update and build on the Agency's previous reuse guidelines issued in 2004, incorporating information on water reuse that has been developed since the 2004 document was issued. In addition to summarizing US existing regulations, the document includes water reuse practices outside of the US, case studies, information on planning for future water reuse systems, and information on indirect potable reuse and industrial reuse. Disinfection and treatment technologies, emerging contaminants, and public involvement and acceptance are also discussed.

(Environmental Tip of the Week – 10/8/12)

EPA FLOATS NEW DRAFT VAPOR INTRUSION GUIDANCE TO REGIONS FOR REVIEW

EPA is asking regional officials to comment on a draft version of its highly anticipated guidance for assessing and mitigating vapor intrusion risks for chlorinated solvents, a document that appears to back environmentalist's calls to require extensive contaminant sampling rather than mathematical models for decision-making, according to a copy obtained by Inside EPA.

The 164-page draft guidance details how to conduct a chlorinated solvents vapor intrusion investigation from the preliminary steps of creating a conceptual site model, through data collection, to a decision-making framework that considers whether a site should be closed or if mitigation is necessary.

The draft includes sections on using preemptive mitigation as an alternative to costly ongoing monitoring, as well as strategies for educating the community on sampling results and health risks.

How EPA will advise state regulators and consultants on assessing the risk of toxic vapors from underground contamination rising into indoor air has been the subject of speculation for a decade since agency efforts to finalize a 2002 draft guidance stalled.

The delay prompted a critical 2009 inspector general report that said lack of guidance has cost EPA leadership on contamination rising into indoor air has been the subject of speculation for a decade since agency efforts to finalize a 2002 draft guidance stalled.

A just-released report from the National Academies' National Research Council may serve as an additional driver for the agency's policy development. The report, "Alternatives for Managing the Nation's Complex Contaminated Groundwater Sits," is urging EPA and others to

expand their assessment of site risks beyond drinking water limits to include short term risks, including increased focus on vapor intrusion and other exposure pathways that regulators have not emphasized.

EPA's Office of Underground Storage Tanks (OUST) also recently circulated a draft guidance for addressing risks of vapor intrusion from petroleum contamination to some state regulators and industry.

Until recently, EPA has said it would issue final guidance for dealing with chlorinated solvents by Nov. 30, but an official with the Office of Solid Waste and Emergency Response (OSWER) recently told state regulators the agency will miss that deadline, although he could not predict when the guidance is expected to be complete.

The official, who outlined to state regulators the basic components of the guidance, also said that because the agency took comments on the 2002 draft as well as more recently on technical documents on which the new draft is based, it will not publicly circulate a final draft before the documents' release.

As EPA has worked to develop the guide, some industry consultants and state regulators have said requiring extensive or long-term sampling at a large number of sites draws resources away from the most contaminated sites and toward a larger number of less contaminated sites, potentially damaging the environment while also derailing real estate deals unnecessarily.

Instead, industry consultants and some regulators have said EPA should allow risk assessors to rule out low-risk sites from further testing based on initial samples, which with the help of mathematical models, can be used to predict contamination in indoor air.

Some EPA officials and environmentalists have said that the unpredictable movement of toxic vapors to indoor air increases the need for site specific assessments and longer-term sampling.

The draft guidance generally follows this approach. It recommends collecting indoor and outdoor air data, as well as subsurface soil gas data, and also provides guidance and tools for mathematical predictions while cautioning that mathematical methods should not be used instead of collecting data or to screen out sites with known contaminants.

(SUPERFUND REPORT – November 12, 2012)

FAIRMONT BRINE PROCESSING TO RESTART FRAC WATER TREATMENT FACILITY

Fairmont Brine Processing, LLC announced in October that it has acquired an idled frac water treatment facility in Fairmont, W. Va. from AOP Clearwater. The facility, which accepted frac and produced water from the area's Marcellus Shale

TECHNOLOGY UPDATES

- Artic Sea Ice - Smallest Ever Recorded, pg. 10
- Groundwater Cleanups - Unlikely for Decades, pg. 12

gas wells, will be redeveloped and reopened under the Fairmont Brine Processing name and is currently accepting frac and produced water contracts to pretreat and recycle the water to return back to industry participants.

The facility is currently accepting frac and produced water contracts to pre-treat and recycle the water – remove the oils, organics and barium – and return the treated water back to industry participants. Beginning in February 2013, the site will commence full-scale operations in which it accepts frac (flowback) and produced water, pre-treats it and separates the remaining brine into clean drinking quality water and granular salt. Frac and produced water contracts for full-scale operations will be accepted beginning on October 15, 2012. The facility's capacity is targeted for 4,000 barrels per day.

Initially constructed in 2009, the facility was the first of its kind and remains the only full-scale facility to desalinate frac and produced waters from the Marcellus Shale gas plan. Desalination plants are commonplace throughout the world and generally process seawater into drinking water by removing salt in regions of the world that don't have an abundant natural supply of fresh water. The Fairmont plant utilizes a desalination process on frac and produced water, which can have a salt content 4 or 5 times higher than that of seawater.

The facility can be contacted at 304-363-9786.

(Fairmont Brine Processing – 10-12)

ARCTIC SEA ICE SMALLEST EVER RECORDED

According to the National Aeronautics and Space Administration (NASA) and the National Snow and Ice Data Center, the ice cap over the Arctic Ocean is smaller than at any time since consistent satellite observations of the polar cap began. The Defense Meteorological Satellite Program's Special Sensor Microwave Imager found that, as of August 26, the sea ice encompassed 1.58 million m². Although sea ice naturally increases during the cold Arctic winter and contracts under the warmer spring and summer temperatures, satellites have observed a 13 percent decline in the minimum summertime extent of the sea ice every decade for the past 30 years. The sea ice has also become thinner.

(National Aeronautics and Space Administration – Civil Engineering – October 2012)

**RT'S 24 HOUR
URGENT LINE
(800) 725-0593**

TECHNOLOGY UPDATES (Continued)

NGV AND HYBRID WASTE COLLECTION VEHICLES ARE GATHERING MOMENTUM; BIG SAVINGS AT HAND

As time goes by the impetus and synergy for the development of viable natural-gas and hybrid collection vehicles – and even electric transport equipment – has come into its own. Whether fuel prices (gasoline or diesel) are up or down at the moment is irrelevant. In the long term, as municipalities look for investments that are both cost-effective and environmentally friendly, hybrid systems and natural gas-powered vehicles (NGVs) clearly are a move in the right direction.

NGVs in the Driver's Seat

The markets for the use of NGVs aren't showing any indication of slowing down for the most part, according to Scott Edelbach, general manager of sales at Vocational Energy in Tampa, FL. "As far as CNG [compressed natural gas] goes, the big trucks, the 9 liter guys, all the vocational truck lines including concrete and garbage trucks have had an engine this size for five or six years, and it's worked really, really well. Now the 12-liter engine is coming out from Cummins Westport, available at the beginning of 2013 and will open up those really big over-the-road heavy hauler applications.

"CNG and LNG [liquefied natural gas] both are going to be great, making big transitions over the next several years. Natural gas is currently selling for \$2.65 to \$2.70 per 1000 cubic feet."

In terms of fuel, that works out to be 7.2 gallons, a relatively high amount. This means the natural gas (from which CNG is created) sells for roughly 40 to 45 cents per gallon right now. Add in the state and federal road taxes, equipment maintenance, and operational costs, and this is still substantially less than diesel fuel, putting total production costs at between \$1.30 and \$1.60 per DGE. Even if the price for raw natural gas went up to \$20 for 1,000 cubic feet, it would be comparably priced to diesel fuel; according to Edelbach.

"This has been true whether there has been fracking or not. Fracking has helped somewhat to bring the price of natural gas down, but over the last 10 years, natural gas has averaged about \$4 to \$4.50 per cubic foot, still far below the amount it would have to reach to be close to the price of diesel fuel. We're pretty optimistic that the price of the fuel itself is going to be modest for a long time. The truck engines are performing really quite well. People like them, they're quieter, they give them the power that they need, and there's lots of benefits there."

Regarding emissions, users don't have all the after-treatment that you have in all the diesel-guilt trucks. Though it isn't a particularly good fit for light cars, it's definitely a good one for the truck industry and will be for quite a while.

"Safety-wise, natural gas is better than gaso-

line or diesel," adds Edelbach. "I think the industry is pretty comfortable with the safety of the technology and the reliability.

"We've been in this for four years now. Last year, we built 17 projects in 12 states across the country. Natural gas is just one of many alternative transportation fuel options going forward. There's one solution that fits every vehicle type, but CNG is certainly a great solution for many sectors of the trucking industry."

Hybrid Comes of Age

Crane Carrier is a heavy-duty custom truck manufacturer that builds trucks for a variety of vocational industries. "We are a systems integrator, buying a [hybrid or CNG] system from a manufacturer and integrating that system into our chassis," explains Glenn Pochocki, national account executive. "As a chassis supplier we've been somewhat of an important link in working with these other manufacturers or system integrators of the hybrid system so that they understand what the expectations are to the system, how the controls work, and how they integrate or work with an application such as a refuse truck."

Between the years 2008 and 2009, before the credit crunches and the stock market crash, fuel prices were rising and there was considerable interest in hybrid technology, and growing. There were also a number of emerging technologies in development. However, the cost at the time was extremely high. "It was in the neighborhood of anywhere from a couple hundred thousand dollars to a million dollars for preproduction and prototype configurations," adds Pochocki.

Since then, a number of the technologies and the suppliers have been weeded out. There aren't as many companies out there.

With fuel prices creeping up and the emergence of solid alternative fuel technologies, we are no longer limited to just diesel. There are now affordable alternatives to consider. These include moving away from diesel to CNG or LNG fuels. Natural-gas-based fleets will cut fuel costs in half. An additional alternative would be to use hybrid technology. There are three main hybrid systems: parallel, series and PHEV.

The parallel hybrid system is used in "parallel to the existing drive train."

The existing drive train has an engine and transmission. The transmission is conducted to the rear axle through a drive shaft. A parallel system will either be integrated into the transmission or be a separate unit located between the transmission output and the rear axle input. Parallel systems typically are lower in cost. If the system isn't operating properly, it can be turned off and the vehicle can be operated in a normal mode without the hybrid system running.

A series hybrid system basically replaces the automatic or manual transmission that is located in the vehicle with a complex list of components. The components are either hydraulic or electric

and provide the movement of the vehicle. Series hybrid systems are generally more expensive installations in comparison with parallel hybrid systems.

A plug-in hybrid electric vehicle, or PHEV, is another fuel alternative. In some cases it may not have an onboard engine, but it will have an electric storage device such as a battery or a generator and a motor. The PHEV takes the electric energy that's stored and drives the motor, which is also the generator and which moves the vehicle. When the vehicle is coming to a stop, the motor works to recover the energy of the moving vehicle in the braking mode and returns that electric power to the battery for reapplication when the vehicle accelerates.

That operation is typical, whether it's a parallel or a series hybrid system. "That's the key with a hybrid system," explains Pochocki. "In a hybrid system, you are basically trying to capture the kinetic energy of the vehicle when it's coming to a stop and turning that energy—by driving either a hydraulic pump or an electric motor—to a source device that is used to propel the vehicle when you step on the accelerator pedal."

"Series and parallel hybrid systems are available both in electric and hydraulic formats right now, in addition to PHEVs.

The key to the hybrid system is the number of stops in a day and the distances between those stops in the formula in recovering energy and being able to reuse that energy to reduce fuel consumption. The higher number of stops a vehicle has in a day will assist in improving the payback and performance of a system. But, the distance between those stops is just as critical because if there is not adequate distance between stops, the system will typically not recover the amount of energy necessary to propel the vehicle between the stops. The optimal distance between stops is 75 to 100 feet. If the stops are fewer than 50 feet apart from one another, then there is not going to be enough charge between the stops to propel the vehicle. Every time acceleration occurs, the driver actually is depleting the system more than it is capable of recovering between the stops.

The number of stops and distance between the stops is key input on any formulae for calculating the vehicle's payback, performance; or potential fuel savings. Typically, a system will extend a vehicle's brake life two, three, and maybe four times. So if a collection fleet is replacing brakes on a vehicle every six months, it could potentially go 12, 18 or maybe as many as 24 months before brake work.

Understanding Your Needs

"We have some people using their hybrid the way it was intended to be used," according to Eaton Corp.'s Ben Hoxie, chief engineer for hydraulic hybrids. "They are saving a lot of fuel, improving brake life, gaining productivity, and

TECHNOLOGY UPDATES *(Continued)*

getting a lot of value out of the hybrid.

“Other customers deployed hybrid equipment without complete understanding of route dynamics and system utilization. In these cases, hybrid does not do a lot for them. There are a large variety of factors involved; things will always be systems-specific and truck-specific. If too much highway driving is involved, it may not be the best fit for an operation.”

Increasing Fuel Efficiency 100%

Parker-Hannifin is the only manufacturer to have an advanced series of hybrid drive system in production. The fundamental difference between other systems serving the Class 8 vehicle market and Parker's RunWise system is the hydrostatic drive combined with brake energy recovery capabilities.

The technology integrates mechanical and hydraulic drive elements into a three-speed transmission to optimize efficiency at all speed ranges. All shifting occurs smoothly and automatically, and all speeds accommodate brake energy recovery, allowing stored brake energy to be used to power the vehicle in all modes of transportation. The results are reduced fuel consumption, less brake wear, lower operating costs, and improved productivity for the operator.

“After some training to understand the technology, drivers are able to cover their routes in a smoother manner and in less time,” explains Tom DeCoster, business development manager for Parker-Hannifin Hybrid Drive Systems. “As long as they're on the routes collecting, the system does its thing, which is saving more than 40% on fuel compared to traditional trucks, reducing emissions and improving productivity, including less brake wear over the life of the truck.”

(MSW Management – November 2012)

CLEANUP OF MOST CHALLENGING US CONTAMINATED GROUNDWATER SITES UNLIKELY FOR MANY DECADES

At least 126,000 sites across the US have contaminated groundwater that requires remediation, and about 10% of these sites are considered complex, meaning restoration is unlikely to be achieved in the next 50 to 100 years due to technological limitations, says a new report from the National Research Council. The report adds that the estimated cost of complete cleanup at these sites ranges from \$110 billion to \$127 billion, but the figures for both the number of sites and costs are likely underestimates.

Several national and state groundwater cleanup programs developed over the last three decades under various federal and state agencies aim to mitigate the human health and ecological risks posed by underground contamination. These programs include cleanup at Superfund sites; facilities that treat, store, and dispose of hazardous wastes; leaking underground storage tanks; and federal facilities, such as military

installations. The US Department of Defense has already spent approximately \$30 billion in hazardous waste remediation to address past legacies of its industrial operations. DOD sites represent approximately 3.4% of the total active remediation sites, but many of these sites present the greatest technical challenges to restoration with very high costs. Therefore, the agency asked the National Research Council to examine the future of groundwater remediation efforts and the challenges facing the US Army and other responsible agencies as they pursue site closures.

“The complete removal of contaminants from groundwater at possibly thousands of complex sites in the US is unlikely, and no technology innovations appear in the near time horizon that could overcome the challenges of restoring contaminated groundwater to drinking water standards,” said Michael Kavanaugh, chair of the committee that wrote the report and a principal with Geosyntec Consultants, Inc., in Oakland, California. “At many of these complex sites, a point of diminishing returns will often occur as contaminants in groundwater remain stalled at levels above drinking water standards despite continued active remedial efforts. We are recommending a formal evaluation be made at the appropriate time in the life cycle of a site to decide whether to transition the sites to active or passive long-term management.”

The estimated range of remediation costs do not account for technical barriers to complete cleanup at complex sites or the costs of cleanup at future sites where groundwater may become contaminated, the committee said. A substantial portion of the costs will come from public sources as some of complex sites are orphan sites and many other complex sites are the responsibility of federal or state agencies.

The committee said that the nomenclature for the phases of site cleanup and cleanup progress are inconsistent among public and private sector organizations, which could confuse the public and other stakeholders about the concept of site closure. For example, many sites thought of as “closed” and considered successes still have contamination and will require continued oversight and funding over extended timeframes in order to maintain protectiveness, including 50% of the contaminated groundwater sites evaluated by the committee that have been deleted from the Superfund list. More consistent and transparent terminology that simply and clearly explains the different stages of cleanup and progress would improve communication with the public.

“The central theme of this report is how the nation should deal with those sites where residual contamination will remain above levels needed to achieve restoration,” Kavanaugh stated. “In the opinion of the committee, this finding needs to inform decision making at these complex sites, including a more comprehensive use of risk assessment methods, and support for a national

research and development program that leads to innovative tools to ensure protectiveness where residual contamination persists. In all cases, the final end state of these sites has to be protective of human health and the environment consistent with the existing legal framework, but a more rapid transition will reduce life-cycle costs. Some residual contamination will persist at these sites and future national strategies need to account for this fact.”

The committee said that if a remedy at a site reaches a point where continuing expenditures bring little or no reduction of risk prior to attaining drinking water standards, a reevaluation of the future approach to cleaning up the site, called a transition assessment, should occur. The committee concluded that cost savings are anticipated from timelier implementation of the transition assessment process but funding will still be needed to maintain long-term management at these complex sites.

(Env. Resource Center – 11/12/12)

UPDATED EPA TIER 2 REPORTING SOFTWARE NOW AVAILABLE

Under the Emergency Planning and Community Right to Know Act (EPCRA, also known as SARA Title III), your site must submit Tier 2 forms on March 1 of each year if you have certain chemicals on-site. Chemicals listed as extremely hazardous substances are assigned threshold planning quantities which form the basis for determining if the Tier 2 form is required. However, if a chemical is classified as an OSHA hazardous chemical, and is not on the list of extremely hazardous substances, the threshold is 10,000 lb. You can find the list of extremely hazardous substances on EPA's list of lists. The list includes many common chemicals, such as sulfuric acid, which has a threshold planning quantity of just 1,000 lb. Many sites have enough lead acid batteries to trigger the sulfuric acid threshold.

The newest version of Tier2 Submit is available for Reporting Year (RY) 2012, which can be used to report EPCRA Tier II chemical inventory data by the March 1, 2013, deadline for RY 2012. Your state may have specific reporting requirements; therefore, you should first check with your state. You can confirm state requirements, download the correct version of Tier2 Submit for your system if your state accepts it, and obtain the Facility Submission Guide at this link.

(Env. Resource Center – 11/20/12)

**VISIT OUR
WEB PAGE
WWW.RTENV.COM**

NJ UPDATES

RT FEATURE ARTICLE A KEY NEW JERSEY LIABILITY CASE

DRY CLEANER CASE – DEP MUST SHOW A LINK

By Robert Baranowski, Esquire with *Comments*
by *Chris Ward*

The NJ Supreme Court has ruled that “in an action [under the Spill Act] to obtain damages, authorized costs and other similar relief under the Act there must be shown a reasonable link between the discharge, the putative discharger, and the contamination at the specifically damaged site.” The court rebuffed DEP’s attempt to impose liability for a PCE discharge on a former dry cleaning operator where there was no proven nexus between the alleged discharge and groundwater contamination discovered in the vicinity of the accused discharger.

New Jersey Dep’t of Env’tl. Prot. v. Ofra Dimant (A-2-11) (067993)

Argued May 7, 2012 -- Decided September 26,
2012

LaVECCHIA, J., writing for a unanimous
Court.

In an appeal, the Court considered the nature of the connection that must be proven in this action by the New Jersey Department of Environmental Protection (DEP) under the Spill Compensation and Control Act (Spill Act or Act) against Sue’s Clothes Hanger (Sue’s), the only direct defendant remaining in the case, for costs expended in the investigation and remediation of contaminated groundwater that tainted private wells in Bound Brook. The facts are not disputed on appeal. In 1988, well samples revealed groundwater contaminated with perchloroethylene (PCE), a compound used in the dry cleaning industry. PCE evaporates quickly in air and dissolves in water.

Note – Sources of PCE contamination can include: discharge of contaminated wastewater into sewers or septic systems, floor spills, leaking PCE containers, and condensation of heated vapors generated during the dry cleaning process which vent outside the building.

The wells were located south and southeast of a cluster of buildings that included Sue’s, which was located in a strip mall that had been the location of a laundry and dry cleaning business since the 1950s, and Zaccardi’s Cleaners (Zaccardi’s), which had long been operating, and still was at the time of trial, as a full-service dry cleaner that uses PCE. Sue’s prior owners, the Shahs, operated the business as a laundromat from 1985 to 1987. Sue’s also had two dry cleaning machines that used PCE, of which some was absorbed by clothing, some evaporated, and the rest fell into a reservoir under the machine. An exterior pipe vented heat generated during the drying process.

In May 1987, the Sammans purchased Sue’s and ran it as a self-serve laundromat. Beginning in December 1987, they operated the dry cleaning machines to process dropped-off laundry for fifteen months. In December 1988, a fluid sample taken from a pipe at Zaccardi’s revealed PCE. At Sue’s, a sample from a pit near the dry cleaning

machines contained PCE, but tests demonstrated it was not leaking and could not be a contamination source. Another sample was taken from a pipe extending from Sue’s to the building’s exterior. From the opening five feet above the ground, a liquid slowly dripped onto the pavement. The leakage contained more than 3,000 times the permissible level of one per billion of PCE. DEP investigators never retested the pipe. There was no evidence that it continued to drip, how often it dripped, or where it went. There was no evidence that the pavement below eroded, which the trial court found significant because PCE breaks down oils in asphalt and causes it to crumble. Also, PCE is prone to quick evaporation when exposed to air, and the record contained no evidence indicating that the PCE in the dripping fluid volatilized once it struck pavement. *A third dry cleaning operation, Michael James Cleaners, was not sampled by NJDEP during the investigation because the owner stated that PCE was never used at the property.*

Any PCE drip by Sue’s had to have ended by early 1989, because it stopped using dry cleaning machines by that time. *Once dry cleaning at Sue’s ceased, the grated hole in the pit near the machines, and the discharge pipe leading to the exterior were sealed.*

In 2000, more than ten years later, a DEP staff geologist prepared a report on the groundwater contamination concluding that Zaccardi’s and Sue’s were the sources of PCE. The geologist conceded that although the property operated by Sue’s had used dry cleaning machines dating as far back as the 1950s, she had not determined which operator caused the contamination. She concluded that Zaccardi’s had contributed to the contamination because there was evidence of a pipe discharging PCE-laden fluid onto degraded pavement. The parties’ experts provided conflicting testimony about the direction of groundwater flow. The trial court ultimately found that evidence inconclusive. The trial court dismissed the Spill Act claim, concluding that even if the building where Sue’s was located is a contamination source, the evidence is insufficient to establish that Sue’s discharged PCE that contaminated the groundwater. The court found: the groundwater and soil contamination preceded Sue’s dry cleaning operation; there is no evidence that the drip from Sue’s continued or the pavement below showed signs of contamination; the DEP took no other action regarding the drip, suggesting it was not considered to be significant; there is no evidence that PCE in the groundwater or soil came from Sue’s rather than from others who had conducted dry cleaning operations in the building; and because there are alternative sources of contamination from the building and Zaccardi’s, the DEP had not established by a preponderance of the evidence that Sue’s contributed to the groundwater contamination. The Appellate Division affirmed, N.J. Dep’t of Env’tl. Prot. v. Dimant, 418 N.J. Super. 530 (App. Div. 2011). The panel rejected as speculation the assertion that the 1988 discharge from the pipe could have caused the soil and groundwater contamination found in 2000.

NJ UPDATES

- Public Access Rule, pg. 14
- 2nd Round, DEP Guidance, pg. 17

The panel concluded that “the circumstances are devoid of the critical factor that triggers Spill Act liability, namely that defendant must be in any way responsible for the discharge that caused the contamination.” The Court granted the DEP’s petition for certification. 208 N.J. 381 (2011).

The Court held that: To obtain damages under the Spill Act, the DEP must demonstrate, by a preponderance of the evidence, a reasonable connection between the discharge, the discharger, and the contamination at the damaged site. The proofs failed to establish a sufficient nexus between the groundwater contamination and Sue’s discharge during its operation. 1. Pursuant to N.J.S.A. 58:10-23.11b, a “discharge” occurs when a hazardous substance is spilled or otherwise released “into the waters or onto the lands of the State, or into waters outside the jurisdiction of the State when damage may result to the lands, waters or natural resources within the . . . State.” A spill within the state constitutes a discharge subject to potential reaction under the powers authorized pursuant to the Spill Act, whether the action sought is injunctive, investigative, or remedial in nature. A spill outside the state’s boundaries requires damage within the state’s land and waters. Thus, Sue’s committed a “discharge” by operating a business where a pipe emitted fluid containing PCE onto the ground because its actions resulted in the leaking “of hazardous substances . . . onto the lands of the State.” There is no de minimis exception to the prohibition against discharging hazardous substances. The determinative question is whether the DEP has connected the discharge at Sue’s to the relief it seeks against Sue’s: cleanup and removal costs and damages for the contaminated groundwater and funding for compensatory restoration of the natural resources injured as a result of the discharge at the sites of Zaccardi’s and Sue’s. (pp. 21-26) 2. The purpose of the Spill Act is “to provide liability for damage sustained within this State as a result of any discharge of” hazardous substances. N.J.S.A. 58:10-23.11a. One who is “in any way responsible for any hazardous substance” is strictly liable, upon its discharge, for “all cleanup and removal costs no matter by whom incurred.” N.J.S.A. 58:10-23.11g(c)(1). The phrase “in any way responsible” was added when the Legislature amended the Act to expand liability to a broader class of responsible parties and include those who had some control over the direct discharger in each matter. Cases discussing that phrase underscore that it requires some connection that ties the discharger to the discharge alleged to be a culprit in the environmental contamination in issue. (pp. 26-30) 3. Once a party is found responsible for a discharge, the issue is what proof is necessary to establish the required nexus between the discharge and the contaminated site for which cleanup and authorized costs are incurred. Because of differences between the Spill Act and

NJ UPDATES (Continued)

the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C.A. §§ 9601 to 9675, which requires only “some connection” but not proximate cause, it would be inappropriate to adopt the CERCLA standard without first reviewing the Spill Act and its history. (pp. 30-34) 4. Neither the Act nor its history squarely addresses the causation needed to impose liability. The Act states that DEP “need prove only that an unlawful discharge occurred which was the responsibility of the discharger.” N.J.S.A. 58:10-23.11q. Legislative history reveals an intent to distinguish between damages and cleanup expenditures, with liability for the latter to be imposed without regard to fault. While some causal link is required to obtain damages, there is no basis to import a proximate-cause requirement because that would thwart the Act’s purpose. The causation standard must accommodate the Act’s various forms of relief, including injunctive relief or damages, as the request for relief is framed. A party such as Sue’s must be shown by a preponderance of the evidence to have committed a discharge that is connected to the groundwater dam-

age in a real way. It is not enough to prove that a defendant produced a hazardous substance and that the substance was found at the contaminated site. On proof of the existence of a discharge, one can obtain injunctive relief under the Spill Act. In an action to obtain damages and costs, there must be a reasonable link between the discharge, the discharger, and the contamination at the specifically damaged site. (pp. 34-38) 5. There is no reason to disturb the findings that the DEP’s proofs were inadequate to obtain the relief sought from Sue’s. The proofs failed to connect the discharge from the pipe, during Sue’s operation, to the soil or groundwater damage. The DEP never presented sufficient proof for how the drip of fluid containing PCE observed at Sue’s one day in 1988 resulted in the contamination of the groundwater in Bound Brook. The DEP’s claims for relief -- for loss of natural resources and to have Sue’s reimburse the State for the cost of remedying the harm that resulted from the groundwater contamination -- were appropriately rejected. Nor can the DEP credibly claim, more than a decade after first observing the dripping pipe, that Sue’s must bear

the expense of studying the ways in which that drip might have contributed to the contamination and what must now be done to remediate it. (pp. 38-42)

During the trial, an NJDEP witness stated that the grated pit at Sue’s was not a source of contamination “because sewer lines are usually not a source of contamination”. Numerous studies have verified that large PCE groundwater plumes have in fact been caused by leaking sewers. Had NJDEP not been so quick to dismiss the sewer system as a potential point of discharge, the court may have determined Sue’s to be liable for the groundwater contamination.

The judgment of the Appellate Division was **AFFIRMED AS MODIFIED.**

CHIEF JUSTICE RABNER; JUSTICES ALBIN, HOENS, and PATTERSON; and JUDGE WEFING (temporarily assigned) join in JUSTICE LaVECCHIA’s opinion.

(By Robert S. Baranowski, Jr. – Highland Levin LLP – and Comments by Chris Ward – RT Environmental Services)

AN RT REDEVELOPMENT SITE . . . SUCCESSFUL REUSE BY AIM ACADEMY

The AIM Academy recently announced, that 100% of their Class of 2012, is college bound. At the AIM Academy, now located in River Park, which was formerly the Simpson Paper Company, RT teamed with Preferred Real Estate Investments, to redevelop the site along the Schuylkill River. The Academy is located in a picturesque location along the Schuylkill, where steep elevations along both sides of the river create a “saddle”, known to hydrologists for wet weather flood observations.

AIM college graduates are now attending classes at 23 colleges, including the University of Denver, the University of Arizona, Seton Hall College, Drew University, and a large number of Philadelphia area schools, including LaSalle University, Rosemont College, and Drexel.

RT congratulates the graduates of AIM Academy and the Academy in helping make successful reuse of a site steeped in Schuylkill River waterfront tradition.

PUBLIC ACCESS RULE WILL ENHANCE PUBLIC ACCESS TO BEACHES AND TIDAL WATERWAYS

Christie Administration Initiative Will Enhance Access to Beaches and Tidal Waterways.

Department of Environmental Protection (DEP) Commissioner Bob Martin in October signed the Public Access Rule, a Christie Administration initiative that provides the State with common sense mechanisms for working cooperatively with local governments to enhance public access to New Jersey’s beaches, bays and tidal waterways.

The rule became final upon publication in the New Jersey Register on Nov. 5. It applies to 231 municipalities from the New York – New Jersey Harbor region, south along the entire coastline, and north again along the Delaware Bay and tidal portions of the Delaware River (news release).

The Public Access Rule recognizes that the Jersey Shore and waterfronts are diverse, dynamic areas that provide a wide range of public access opportunities: ocean and bay beaches, marinas and boat ramps, urban greenways and waterfront parks, nature areas and historic sites, to name a few. The rule maintains existing public access and provides tools to help local governments make it even better.

For more information, visit www.nj.gov/dep/cmp/access. This website has information about public access, including public access points, public restrooms, parking facilities, fishing spots, marinas, boat and kayak launches, handicapped-accessible facilities, and amenities such as restaurants.

To read the rule adoption document, which includes a summary of public comments and DEP’s responses, visit: www.nj.gov/dep/rules/adoptions/adopt_20121105a.pdf.

For a copy of the original rule proposal and first notice of amendments, visit www.nj.gov/dep/rules/notices_archive.html.

DEP – Public Access to NJ Shoreline

The DEP has long been protecting the public’s right to access the shoreline, but they are proposing to restructure how they require public access under the Coastal Zone Management rules. The proposed rules will continue to impose reasonable public access regulatory requirements, as well as employ a team of professionals to work with municipal employees to create a more comprehensive public access plan. They would like to be able to inform the public about public access points enabling people to choose the ideal location to enjoy the NJ shoreline. The DEP would also like to explore opportunities to make public access even better and are looking at other state’s successes as potential opportunities.

Understanding that it is in everyone’s best interest to preserve, protect, and make available the public accessibility of the ocean, shore, and tidal waterways, the DEP will continue to uphold its historical role in protecting the public’s right to access the shorelines and waterways as well as seeking ways to improve the accessibility for the public by proposing regulatory changes.

-Glenn Graham, P.G.

ENERGY UPDATES

NATURAL GAS PRODUCERS TURN TO "GREEN COMPLETION" TO CAPTURE DRILLING EMISSIONS

Natural Gas producers are turning to new techniques to capture the gas emitted during the well-completion process. In the past, a well's initial production was typically vented or burned off to allow impurities to clear before the well was tied into a pipeline.

Now, more operators are employing reduced-emission completions—a "green completion"—a process in which impurities such as sand, drilling debris, and fluids from hydraulic fracturing are filtered out and the gas is sold, not wasted.

The five gas wells the EQT Corp. completed in October at a remote site in Sycamore, in Green County's Washington Township are typical. Compared to a gas flare, which roars like a jet engine and licks the sky with flame like a giant welder's torch, green completion is dull and quiet.

EQT is not the only drilling company that has embraced green completions. The equipment for separating the gas from the "flowback" has been perfected over the last decade and in the next three years, using it will become standard practice across the nation.

The U.S. Environmental Protection Agency approved new rules this year requiring green completions nationwide by 2015, except for exploratory wells unconnected to pipelines. As of October 12, 2012, drillers can no longer vent the gas into the atmosphere without burning.

The EPA says green completions will save drillers up to \$19 million a year by capturing natural gas that would be wasted.

Much of the new technology has been driven to address fears about drilling, including hydraulic fracturing, the extraction technique that has turned impermeable shale into a bonanza of oil and gas.

In devising the new rules, the EPA said it was acting under its Clean Air Act mandate to reduce emissions of volatile organic compounds and pollutants such as benzene, which can cause cancer. The agency said the new rules were expected to eliminate 95 percent of the smog-forming volatile organic compounds emitted from the more than 13,000 new gas wells each year.

The EPA said a "co-benefit" of green completions was a reduction in methane emissions by 1 million to 1.7 million tons a year.

The government delayed full implementation of the rule until 2015 to allow the industry to build enough equipment to handle the workload.

The American Petroleum Institute and other industry groups are challenging the new rules in the U.S. Court of Appeals in Washington. So are environmental groups.

Some industry leaders say the biggest benefit to green-completion technology is that they hope it puts the emissions controversy to rest.

"I do think it addresses a criticism that the industry has had in terms of methane emissions, and maybe we can take that off the table," Jack P. Williams, Jr., president of XTO Energy, said in a recent interview.

"EQT differs from many gas-exploration companies because it also serves a retain customer base through its as utility in southwestern Pennsylvania, Equitable Gas Co. It says green completions achieve a significant emission reduction.

Before EQT began drilling on the Pettit Run Road site, a five-acre site carved out of a hillside, the company first extended its pipeline network to the location so it would be ready to receive any gas produced, said Michael Rehl, manager of completion operations.

During the spring, the five wells were in a row, 15 feet apart, to a depth of about 7,500 feet, where they turn horizontally into the Marcellus Shale layer and follow parallel paths, separated by about 1,000 feet. Then the wells were lined with several layers of steel pipe and concrete, and hydraulically fractured.

During a green completion, the mixture is routed through a series of filters. A cylindrical sand trap collects the solid materials, which are sent to a landfill. The water, containing chemicals and mineral contaminants, is treated and stored for reuse in the next drilling operation.

And the natural gas is channeled into a pipeline and sent off to market, rather than being flared into the sky to achieve no other purpose than to heat the planet.

(By Andrew Maykuth, Philadelphia Inquirer, 11/27/12)

POLLUTION PERHAPS LINKED TO GAS DRILLING VANISHING

Researchers at Carnegie Mellon University say a water quality problem in the Monongahela River that may have been linked to Marcellus Shale natural gas drilling is going away.

Jeanne VanBriesen said Thursday that preliminary data from tests this year showed that levels of salty bromides in the river have declined significantly when compared to 2010 and 2011. In many cases the bromides were at undetectable levels this year, and in general they returned to normal levels.

"These are very nice, low bromide levels, where we would like them to be," Van Briesen said of the 2012 test results, which were presented at a water quality conference in Pittsburgh.

VanBriesen said the decline appears to coincide with a voluntary ban on disposing gas drilling wastewater that took effect in the spring of 2011. The wastewater contains large amounts of naturally occurring, ultra-salty bromides, and drillers had been taking millions of barrels of it to conventional wastewater treatment plants that discharge into the Monongahela River.

In early, the state Department of Environmental Protection called on drillers to voluntarily stop using riverside plants to get rid of the wastewater, and major companies and industry groups agreed to the request.

The state's request was made after VanBriesen and other researchers presented evidence that the discharges were altering river chemistry in a way

that had the potential to affect drinking water, and operators of municipal water supplies grew concerned.

Although not considered a pollutant by themselves, the bromides combine with the chlorine used in water treatment to produce compounds that can threaten public health, and levels had soared in 2009 and 2010. Bromide levels in the river declined somewhat in 2011, but not enough for researchers to say that the river had returned to normal levels.

(AP/Times Online – 11/8/12)

CHESAPEAKE SAYS IT'S THRILLED WITH OHIO SHALE RESULTS

Chesapeake Energy Corp. is still in love with the liquids-rich Utica Shale in eastern Ohio.

It is eyeing Carroll, Harrison and Columbiana counties as Ohio's "core of the core" where the Oklahoma energy giant will continue drilling for natural gas, oil and other liquids.

Friday marked the first time that Chesapeake had publicly identified those counties as the heart of its drilling plans.

The Utica shale still appears to as lucrative as the Eagle Ford shale in Texas, and Chesapeake is "absolutely thrilled" with the early Utica results, CEO Aubrey McClendon said in a teleconference with analysts discussing its third-quarter financial results.

The company envisions drilling up to 4,000 wells its leased Ohio core area in the next 20 years, officials said.

To date, Chesapeake – the No. 1 player in Ohio – has drilled 134 wells in the Utica shale.

That drilling will produce bigger results in 2013 as new pipelines and processing facilities come online, McClendon said.

A total of 32 of those wells are producing, and 37 other wells await pipeline construction. Another 65 wells are in various stages of completion.

Chesapeake has 13 drilling rigs operating in eastern Ohio, one of 10 drilling areas around the nation. It has leased 1.3 million acres, but the heart is 300,000 to 400,000 acres in Carroll, Harrison and Columbiana counties, McClendon said.

Oil and wet-gas liquids found with natural gas in that part of Ohio are especially lucrative to driller, because the price of natural gas had dropped sharply because of a supply glut.

In fact, the company is expanding its search for liquids, especially oil. Ethane, Butane and propane, the so-called natural gas liquids, are also valuable, the company said. Liquids now account for 21 percent of the firm's production and 63 percent of the revenue in one of its accounting forms. Chesapeake has indicated that it intends to keep and develop that core and to sell off excess Ohio acreage. Four Ohio land sales are in the works but have not yet been announced.

(By Bob Downing, Akron Beacon, 11/2/12)

ENERGY UPDATES (Continued)

STATE ATTEMPTING TO DRAW GAS PROCESSING PLANTS

The presence of Marcellus Shale natural gas is prompting new economic development opportunities – more specifically, two large gas processing plants – in Pennsylvania, and the state Legislature wants to take full advantage of it, according to Sen. John Gordner.

Marcellus Shale's effects on Pennsylvania was one of the topics Gordner touched on when he spoke to the Greater Hazelton Chamber of Commerce recently.

Gordner, R-27, Berwick, said the Legislature approved the Pennsylvania Resource Manufacturing Tax Credit, which is specifically geared toward a gas processing plant, known as a cracker plant.

The senator said two gas companies each want to build a cracker plant in western Pennsylvania.

"Shell is looking to put in a cracker plant," he said. "It would be a \$3 billion facility. There is a second entity looking at another \$1 billion-plus cracker plant in western Pennsylvania. To have two billion-dollar-plus facilities would be incredible."

To encourage companies to go ahead with their plans, the Legislature approved the tax credit, which Gordner said had "huge bipartisan" support.

"It would be a tax credit against new, future taxes, meaning it would have zero effect on the budget," Gordner said. "The only way to get it (the tax break) is by new tax growth. Shell has taken an option, but still not made the full commitment. We're still hopeful."

Marcellus Shale gas has been the biggest segment of economic growth in Pennsylvania the past two years, through either direct jobs or indirect jobs, Gordner said. Direct jobs are those provided by the gas extraction or processing, and indirect jobs are generated by the industry.

The presence of Marcellus Shale's dry gas makes natural gas prices low. Western

Pennsylvania's wet gas yields material to make plastics, which will create jobs.

"If you think of all the different entities that use plastics – diapers, tires or toys – there are a lot of possibilities," Gordner said. "What you will find is that all of these companies that use plastic material will locate near the cracker plant. The benefits isn't necessarily the cracker plant, but all of the industries that will go around it."

Another way Marcellus Shale gas has created or retained jobs is a group of oil refineries at Marcus Hook, near Philadelphia, that have been saved by Marcellus Shale.

"All of those were being shut down over the last year or two," Gordner said. "All of them have been saved. That's going to save 300 or 400 high-paying jobs, when it looked like they were going to be shut down forever."

In February, the state began collecting an impact fee for the Marcellus Shale gas. Gordner said the first collection netted \$200 million, which the state is starting to dole out.

The impact fee may bring in natural gas-consuming vehicles to the state, Gordner said.

"The way the law was set up, all 67 counties will see a pot of money," he said. "One allotment can be used for mass transit converting to natural gas, and setting up natural gas pumping stations. If you have natural gas vehicles, and you can't go to Hazelton and fill up with natural gas, then having a natural gas facility doesn't work."

Since most of the natural gas in the United States is located in the south and west, there is no cracker plant east of the Mississippi River. Most of them are in Louisiana and California.

(Jim Dino, Standard-Speaker, Hazelton, PA – 6-12)

DEP PROPOSES NEW RULES FOR SHALE INDUSTRY

A state proposal to make far-reaching amendments to oil and gas regulations governing Marcellus Shale gas development indicates

stronger rules are needed to protect Pennsylvania's surface and groundwater resources.

There are more than 100 proposed changes in a 23-page draft "concept paper" from the state Department of Environmental Protection issued in August.

The document is the first step in a regulatory rewrite, required by last year's Act 13 amendments to the state's 1984 Oil and Gas Act, and was circulated to the DEP's Oil and Gas Technical Advisory Board. Still to be completed is regulatory language based on the proposals.

There's a lot of work to do, and we're just starting to review it," said Burt Waite, a member of the technical advisory board since 1996. "The changes are to address Marcellus Shale drilling operations and the shortcomings of the present regulations. Things are being tightened up, and that's appropriate."

Mr. Waite said the proposed regulatory changes are "comprehensive and potentially the biggest" since the enactment of the state Oil and Gas Act in 1984.

Among the more notable proposals in the concept paper is the elimination of the drilling industry's use of in-ground pits for storage of "produced fluids," which are briny liquids that flow back to the surface after a well has been hydraulically fractured, and a requirement to locate and map abandoned gas and oil wells near new well sites that could allow methane to migrate into shallow aquifers.

Other proposals would require drillers to build secondary containment structures around all new permanent storage tanks to protect nearby waterways and regulate on-site wastewater treatment processes and pipelines for the first time.

(By Don Hopeny/Pittsburgh Post-Gazette/August 28, 2012)

EPA PCB BULK PRODUCT WASTE REINTERPRETATION

On February 29, 2012, EPA published in the Federal Register a draft reinterpretation of EPA's position regarding PCB-contaminated building materials, specifically addressing the definition of PCB bulk product waste and PCB remediation waste. Based on comments received, EPA modified the proposed reinterpretation to improve the ability to implement the reinterpretation.

The reinterpretation is specifically addressing the definitions of bulk product waste (e.g., PCB contaminated caulk or paint) and remediation waste (e.g., PCB contaminated building materials). This distinction is important as it determines the appropriate cleanup requirements and disposal options. The reinterpretation being proposed in this notice would allow building materials (i.e., substrates – wood, concrete, masonry) "coated or serviced" with PCB bulk product waste (e.g., caulk, paint, mastics, sealants) at the time of disposal to be managed as a PCB bulk product waste, even

if the PCBs have migrated from the overlying bulk product waste into the substrate. This label as PCB bulk product waste would stay with the contaminated building materials. PCB bulk product waste can be disposed of properly in authorized municipal landfills. Previously, impacted substrates were considered to be remediation waste and had to be disposed of in TSCA approved landfills. The change will simplify PCB cleanup projects and reduce disposal costs.

For further information related to PCB issues, please contact Lawrence Bily at 610-265-1510 extension 236 or by email at lbily@rtenv.com

For a copy of the Memorandum, go to: www.epa.gov/osw/hazard/tsd/pcbs/pubs/caulk/pdf/pcb-bulk-waste-memo102412.pdf

-By Larry Bily

NJDEP ANNOUNCES 2ND ROUND OF TECHNICAL GUIDANCE DEVELOPMENT

With the implementation of the NJDEP Site Remediation Reforms Act (SRRA), 19 technical guidance documents have been developed using a Stakeholder process over the last few years. NJDEP has provided technical training on most of the finalized technical guidance documents to date.

A list of the completed Technical Guidance Documents is listed below:

1. Analytical Methods
2. Attainment/Compliance
3. Conceptual Site Model (CSM)
4. Ecological Evaluation Technical Guidance
5. Alternative and Clean Fill Guidance for SRP Sites
6. Historic Fill and Diffuse Anthropogenic Pollutants Guidance
7. Immediate Environmental Concern (IEC)
8. Landfills Investigation Guidance
9. Linear Construction Technical Guidance
10. LNAPL
11. Monitored Natural Attenuation
12. Ground Water SI/RI/RA
13. Preliminary Assessment
14. Presumptive and Alternate Remedy Guidance
15. Receptor Evaluation
16. Soil SI/RI/RA
17. Technical Impracticability (TI)
18. Technical Guidance for Investigation of Underground Storage Tank Systems
19. Vapor Intrusion

With the full implementation of SRRA on May 7, 2012, and the permanent licensure of the License Site Remediation Professional (LSRP), it is been identified that additional technical guidance development is needed. As such, the NJDEP has implemented a second round of technical guidance development.

Six topics have been selected for a second round of Technical Guidance development. These topics are:

1. **Off-site source** (investigating/documenting) - This guidance will address all media and focus on approaches and information needed to adequately document offsite impact.

2. **Co-Mingled Groundwater Plumes** - This guidance will focus on new technical approaches for groundwater characterization, plume forensics, and fate and transport. It will not address policy or litigation issues.

3. **Historic Pesticide Use** - This guidance will focus on sampling approaches and blending techniques to mitigate historic pesticide contamination. This document will not address policy issues.

4. **Capping** - This guidance will focus on technical considerations and options for cap selection and installation. This will also include capping recommendations presented in the Presumptive Remedy Guidance. This document will not address policy or risk related issues.

5. **Performance monitoring of in-situ groundwater remedial actions** - This guidance will focus on issues related to performance monitoring of in-situ groundwater remedial actions and identify needed components of a Permit-by-Rule application.

6. **Evaluation of contaminated groundwater discharge to surface water** - This guidance will focus on new advances in groundwater/surface water investigation and sampling approaches and the understanding of groundwater discharges to surface water bodies.

Technical Guidance Committees are being formed to develop guidance on the above topics.

RT can assist guiding your project through the Site Remediation Program and helping you understand how to incorporate the technical guidance provided in the above listed documents to successfully complete the necessary mediation on your project. Please contact Craig Herr, PG with any questions you may have.

-By Craig Herr, P.G.

RT'S DUE DILIGENCE SERVICES

- Phase I & II Environmental Site Assessments
- Regulatory Database Reviews and File Review
 - Tank Presence / Absence Investigations

PENNSYLVANIA BULLETIN NOTICES

Draft: Technical Guidance – Drinking Water and Wastewater Systems Operator Certification Program Handbook.	September 3, 2012
Technical Guidance – Air Quality Program Guidance for Determination of Significant Figures and Timeliness Report Submittal for Evaluation of Air Contaminant Emissions and Concentrations	September 10, 2012.
Final: Technical Guidance - Civil Penalty Assessment Informal Hearing Procedure for Clean Water Program.	September 10, 2012
Rescission: Technical Guidance - New Source Sampling Requirements for Surface Water Sources.	September 10, 2012
Rescission: Technical Guidance – New Source Sampling Requirements for Groundwater Sources for Community and Nontransient Noncommunity Water Systems	September 10, 2012
Rescission: Technical Guidance - Transient Noncommunity Water Systems.	September 10, 2012
Rescission: Technical Guidance – Policy and Procedures for Mitigating Remedies under the Orphan Sites Program.	September 17, 2012
Rescission: Technical Guidance – Revised Final Guidance for Using Hazardous Sites Cleanup Fund Monies for Emergency Response.	September 17, 2012
Rescission: Technical Guidance – Off-Site Audit Manual for Hazardous Sites Cleanup Program.	September 17, 2012
Rescission: Technical Guidance – Air Pollution Control Act Compliance History Review and Civil Penalty Assessment Procedures.	September 17, 2012
Minor Revision: Technical Guidance – Applicable or Relevant and Appropriate Requirements for Cleanup Response and Remedial Actions in this Commonwealth.	October 1, 2012
Final: Technical Guidance – Guidance for Performing Single Statutory Source Determinations for the Oil and Gas Industry.	October 8, 2012
Draft: Technical Guidance – Permitting of Bulk Water Hauling Systems Guidance.	October 8, 2012
Rescission: Technical Guidance – Pumping Requirements for Construction and Demolition Waste Landfills in Non-Coal Mines.	October 15, 2012
Rescission: Technical Guidance – Liners for Construction and Demolition Waste Landfills	October 15, 2012
Rescission: Technical Guidance – Management of Municipal Ash Waste from Resource Recovery Facilities.	October 15, 2012
Final: Rulemaking – Noncoal Mining Fees.	October 13, 2012
Rescission: Technical Guidance – Residual Waste—General Permitting.	October 15, 2012
The Environmental Quality Board published final regulations increasing permit review fee revenue for surface and underground mining operations from about \$50,000 annually to about \$400,000 a year.	November 12, 2012
The Department of Environmental Protection published a notice of proposed changes to the PA Natural Diversity Inventory Permit Review Process and concerning bond amounts for land reclamation.	November 12, 2012
Draft: Policy for Pennsylvania Natural Diversity Inventory (PND) Coordination During Permit Review.	November 12, 2012
Draft: Title: Conventional Bonding for Land Reclamation—Coal.	November 12, 2012
Final: Technical Guidance – Policy for Implementing the Department Permit Review Process and Permit Decision Guarantee.	November 15, 2012
Final: Technical Guidance – Policy Permit Coordination.	November 15, 2012
The Department of Environmental Protection published a notice of a proposed revision to the State Implementation Plan for motor vehicle emissions budgets for the 5-county Philadelphia Region.	November 19, 2012
New Guidance: Developing National Pollutant Discharge Elimination System (NPDES) Permits for Mining Activities.	November 24, 2012

RT'S BROWNFIELDS SERVICES

- Site Investigations
- Remediation
- Grant Applications
- Expedited Permitting
- Redevelopment Plans
- Public Involvement Plans

FEDERAL REGISTER NOTICES

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

Environmental Protection Agency; Approval and Promulgation of Air Quality Implementation Plans; Maryland; the 2002 Base Year Inventory for the Baltimore, MD Nonattainment Area for the 1997 Fine Particulate Matter National Ambient Air Quality Standard.

(Federal Register – 12/10/2012)

Environmental Protection Agency; Revisions to Stormwater Regulations to Clarify that an NPDES Permit is not Required for Stormwater Discharges from Logging Roads.

(Federal Register – (12/7/2012)

Environmental Protection Agency; Toxicological Review of Inorganic Arsenic (Cancer and Noncancer Effects): In Support of Summary Information on the Integrated Risk Information System (IRIS).

(Federal Register – (12/6/2012)

Environmental Protection Agency; Reconsideration of Certain New Source and Startup/Shutdown Issues: National Emission Standards for Hazardous Air Pollutants From Coal and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units.

(Federal Register – 11/30/2012)

Surface Transportation Board; Solid Waste Rail Transfer Facilities

(Federal Register – 11/21/2012)

Environmental Protection Agency; Approval and Promulgation of Air Quality Implementation Plans; Maryland; Deferral for CO₂.

(Federal Register – 11/16/2012)

Environmental Protection Agency; Approval and Promulgation of Air Quality Implementation Plans; District of Columbia; The 2002 Base Year Emissions Inventory for the Washington DC-MD-VA Nonattainment Area for the 1997 Fine Particulate Matter National Ambient Air Quality Standard.

(Federal Register – 10/30/2012)

Environmental Protection Agency; Approval and Promulgation of Air Quality Implementation Plans; Maryland; Reasonably Available Control Technology Requirements for Volatile Organic Compounds.

(Federal Register – 10/23/2012)

Environmental Protection Agency; National Emission Standards for Hazardous Air Pollutant Emissions; Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks; and Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants

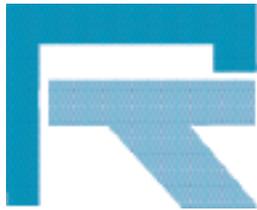
(Federal Register – 9/19/2012)

Environmental Protection Agency; Standards of Performance for Stationary Gas Turbines; Standards of Performance for Stationary Combustion Turbines.

(Federal Register – 8/29/2012)

RT'S ENERGY SERVICES

- Pre-drilling Inspections, Testing and Survey work
- Pad Inspections
- Wetlands Delineation
- Act 2 Services
- SPCC Plans
- Integration of right-of-way and utility design with erosion and sedimentation control plans



KEY HIGHLIGHTS

NJ UPDATES

- Public Access Rule, pg. 14
- 2nd Round, DEP Guidance, pg. 17

PA UPDATES

- Ridley Twp. Redevelopment, pg. 7
- Key PA DEP Guidance Updated, pg. 9

FEDERAL UPDATES

- Coal Power Plant Rules, pg. 4
- PCB Rule Interpretation, pg. 16

TECHNOLOGY UPDATES

- Artic Sea Ice - Smallest Ever Recorded, pg. 10
- Groundwater Cleanups - Unlikely for Decades, pg. 12

RT ENERGY SERVICES UPDATES

- The Marcellus - Superstar of Natural Gas, pg. 1
- CNG Vehicle Mania?, pg. 1
- RT Joins Marcellus Shale Coalition pg. 3
- Drilling Emissions, pg. 15

RT E-MAIL DIRECTORY

TONY ALESSANDRINI	TALESSANDRINI@RTENV.COM	LISA MASCARA	LMASCARA@RTENV.COM
LARRY BILY	LBILY@RTENV.COM	LISA NOCCO	LNOCOCO@RTENV.COM
JENNIFER BERG	JBERG@RTENV.COM	SEJAL PATEL	SPATEL@RTENV.COM
GARY BROWN	GBROWN@RTENV.COM	AHREN RICKER	ARICKER@RTENV.COM
KRISTIN FOLDES	KFOLDES@RTENV.COM	CORTNEY SAVIDGE	CSAVIDGE@RTENV.COM
GLENNON GRAHAM	GGRAHAM@RTENV.COM	CHRISSE LEE	CLEE@RTENV.COM
JOSH HAGADORN	JHAGADORN@RTENV.COM	MARA TAMMARO	MTAMMARO@RTENV.COM
CRAIG HERR	CHERR@RTENV.COM	EMMALEE VECERE	EVERECERE@RTENV.COM
WALTER HUNGARTER	WHUNGARTER@RTENV.COM	KEITH WALSH	KWALSH@RTENV.COM
JUSTIN LAUTERBACH	JLAUTERBACH@RTENV.COM	CHRIS WARD	CWARD@RTENV.COM

VISIT OUR WEBSITE WWW.RTENV.COM



MOST US WATERS GETTING DIRTIER
Page 4

EPA TO BOLSTER COMPLIANCE
Page 5

NEW HUD LEAD PAINT GUIDELINES
Page 6

COAL FIRED POWER PLANT RETIREMENTS
Page 7

DEP'S PERMIT GUARANTEE POLICY
Page 8

SOUTHWEST PA DEP LONG TERM AIR STUDY
Page 9

NJ DRY CLEANER LIABILITY CASE
Page 13