



RTENV.COM

The RT Review

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

**EPA AND ARMY CORPS OF
ENGINEERS ISSUE NOTICE OF
INTENTION TO REVIEW AND
RESCIND OR REVISE
CLEAN WATER RULE**

It is expected that EPA, in conjunction with the Army Corps of Engineers, will issue revised rule-making associated with the Clean Water Rule. The Rule was created by the Environmental Protection Agency (EPA) and the Army Corps of Engineers to clarify water resource management under a provision of the Clean Water Act of 1972.

EPA and the Corps now state that "Through new rule making, the EPA and Army seek to provide greater clarity and regulatory certainty concerning the definition of "waters of the United States, consistent with the principles outlined in the Executive Order and the agencies' legal authority."

President Donald Trump signed an Executive Order in February that allowed Scott Pruitt, the EPA Administrator, to abandon certain clean water protections provided in the final rule. There are media reports that EPA officials are in active discussions with private sector industries to hire private attorneys to rewrite a weakened version of the Clean Water Rule.

Some organizations and government officials are concerned with this process and have suggested that allowing private industry to rewrite and provide input on the rule is not a good thing. They have suggested that EPA must be lacking in staff and budgetary resources to complete the revision, while others have implied that EPA plans to push its obligations onto private industry. Many believe it is not appropriate, and that EPA is not fulfilling its obligations to protect the water and people of this country.

We at RT understand these concerns, however, we believe it is obvious that EPA has historically operated beyond its authority and overstepped its bounds in enforcement actions related to the Clean Water Act. We believe that it is extremely important to have private industry input when new rule-making is taking place. It is important that EPA protect the people and waters in this country, but private industry concerns definitely need addressed, and a balance between the two must be sought. There has been a significant amount of confusion over the years regarding what exactly constitutes "waters of the U.S.", and hopefully the new revisions to the rule will clarify this and other issues.

Justin R. Lauterbach, QEP
Vice President

**MONTGOMERY COUNTY PENNSYLVANIA BROWNFIELD
REDEVELOPMENT: ANOTHER PROJECT UNDERWAY**

By By Walter H. Hungarter, III, P.E., Vice President – RT Environmental Services, Inc.

As manufacturing facility operations contract over time and sites scale back and/or cease operations, environmental



liabilities may linger at sites, and need to be addressed prior to sites being redeveloped. Prior owners and/or operators of a facility or potential new buyers with a desire to redevelop a site into a more economically productive reuse are left with the task of how to manage the environmental liabilities in a manner which is protective of human health and the environment. These types of sites are considered Brownfield Sites, and Montgomery County Pennsylvania is no stranger to Brownfield sites being redeveloped.

RT Environmental Services, Inc. (RT) is proud to be involved with a project in Lower Providence Township, Montgomery County, Pennsylvania which has just begun construction redevelopment in recent months. The property is located near Germantown Pike and Cross Keys Road, and is the location of the former Superior Tube Company manufacturing facility. The planned site redevelopment includes 12 single family homes (Manors at Brynwood) on a cul-de-sac and 139 town-homes (The Courts at Brynwood) situated around three courtyards, creating the feel of neighborhoods. The Manors at Brynwood are being developed by Marc Salamone Homes, and construction is currently underway. The Courts at Brynwood are being developed by WB Homes, and construction is planned to begin in the Fall of 2017.

RT began working on this project in 2014 which involved an intense due

diligence process that included a review of prior and current environmental reports associated with the former Superior Tube Company manufacturing facility. RT also completed a series of focused soil investigations at the property. The soil investigation work concluded that there was only one area of the site which had only limited amounts of impacted soil present. Prior reports also indicated that impacted groundwater was present beneath portions of the site.

To facilitate the redevelopment of the site, the property was entered into the PA DEP Land Recycling Program (also known as Act 2) which documented the remedial investigation work completed and proposed a Cleanup Plan by which the property could be redeveloped taking into account the limited soil and known groundwater impacts. By the end of 2014, PA DEP approved the Remedial Investigation and Cleanup Plan, which proposed a Site Specific Standard via pathway elimination.

The Act 2 Final Report for groundwater was submitted in December 2016 and was approved by PA DEP in January of 2017, which allowed for construction to get underway in February 2017. The Cleanup Plan for soil at the site proposes capping the limited area of soil. Upon implementation of the soil Cleanup Plan, as part of site redevelopment, a Final Report for soil remediation will be completed.

These types of redevelopment projects are very important to our community, as

(continued on page 2)

TABLE OF CONTENTS

Staff and Project News	2
Technology Updates	3
RT Energy News	3
Federal Updates	4, 5
PA Updates	6
NJ Updates	7

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, P.E., Vice President
Phone: (610) 265-1510 Ext. 238

General Manager

E-mail: WHUNGARTER@RTENV.COM

New Jersey

Chris Ward

Phone: (856) 467-2276 Ext. 122

E-mail: CWARD@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, Q.E.P., Vice President

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

**MONTGOMERY COUNTY PENNSYLVANIA BROWNFIELD REDEVELOPMENT:
ANOTHER PROJECT UNDERWAY (continued from page 1)**

well as throughout the Commonwealth, as they bring back into use underutilized and contaminated Brownfield properties. Redevelopment of these types of sites reduces the number of Greenfield (undeveloped and/or farm properties) sites which would otherwise be cleared and used for development. The PA DEP has worked with RT and Developers throughout the Commonwealth using the Act 2 Land Recycling Program to facilitate redevelopment of Brownfield sites like this one in Lower Providence Township. RT has completed hundreds of Act 2 Land Recycling projects since the Program's inception in 1995. If you have a potential Brownfield site in need of redevelopment and need assistance in understanding the potential liabilities of the site and/or its redevelopment, you can contact Walter H. Hungarter, III, P.E. Vice President of RT's King of Prussia, Pennsylvania office at 610-265-1510 x 238.



The Courts at Brynwood



Manors at Brynwood



Lower Providence

RT STAFF AND PROJECT NEWS

Spring is turning out to be an exceptionally busy time for RT. New projects involve an Act 2 project in Philadelphia where a beneficial use/recycling facility is planned to be expanded to include a newly constructed asphalt plant. Historical fill at the site is expected to be addressed under the Pennsylvania Department of Environmental Protection Award-Winning Act 2 Land Recycling Program. Walter Hungarter and Craig Herr are moving forward with this project.

In Western Pennsylvania, a mining permit which is in need of revision will be transferred to a separate entity, and bonding updated and revised. The overall site is at a location where a very large Act 2 Land Recycling project was completed, where there historically was a steel plant and extensive slag deposits are now present. The site is being used for staging for building a large Shell cracker site near Monaca, northwest of Pittsburgh. Chris Blosenski and Gary Brown are managing this project.

Tony Alessandrini is moving forward with a series of projects involving building renovations as large buildings in Philadelphia are being renovated for future use. Philadelphia is seeing a big upsurge in renovation and building activity, with the Philadelphia Downtown Center City and surrounding area seeing rising property values and much

investor attention.

Chris Ward and Maria Scudder are moving forward with due diligence work at a former petroleum retail service station in Westville, New Jersey. The site is being readied for extended use as the location of a sports/baseball practice facility.

At a former electronic circuits manufacturing site in Glen Cove, Long Island, New York, Justin Lauterbach is implementing important tasks related to future reuse of the site. Work has included asbestos containing materials survey work and regulatory file reviews are underway. Future redevelopment as a large scale retail facility is being planned. Another near term task is soil sampling so that concurrence can be reached with the New York State Department of Environmental Conservation on what future uses are appropriate in each area of the site.

Chris Blosenski and Justin Lauterbach are wrapping up work on a remediation site in Clifton, New Jersey, where heat treatment and solvent degreasing was completed. The next phase of the work is expected to begin shortly, to address solvent impacted soil removal to result in future improved offsite groundwater, under U.S. EPA oversight.

We appreciate the opportunity to be of further service to our clients through 2017.

- Gary Brown, P.E.

TECHNOLOGY UPDATES

ARCTIC SEA-ICE LEVELS HIT A RECORD LOW

The frigid top of the Earth just set yet another record for low levels of sea ice in what scientists say is a signal of an over-heating world.

The National Snow and Ice Data Center in Colorado says the Arctic this month set a record low for winter peak

sea ice area: 5.57 million square miles.

That's about 35,000 square miles below 2015's record.

Center Director Mark Serreze says the less ice that grows in winter, the deeper the melt problem is in the Arctic in the crucial summer.

More areas will likely be ice-free.

Serreze says what's happening is

TECHNOLOGY UPDATES

- Arctic Sea-Ice Levels Hit a Record Low, pg. 3

important because Earth is losing a key part of its climate system.

Satellite records go back 38 years.

(Associated Press/SJ Times 3/23/17)

RT ENERGY NEWS

AN RT REVIEW READER COMMENTS ON NATURAL GAS INDUSTRY TRENDS

I found the recent article on natural gas to be particularly interesting and would add to its major points that reusing existing platforms might minimize long term environmental impacts, which is implied but not stated in the article. In addition, if companies were to subscribe to the protocols developed by the Center for Responsible Shale Development (as have Shell, Consol, Chevron and EQT) and use a landscape approach as advocated by The Nature Conservancy (utilizing the software that TNC has developed), the impacts could be minimized even more.

A number of important industry trends have become evident, including:

-Natural gas drilling platforms have generally not been built, taking into account that more drilling could occur. However in the Southwest Pennsylvania and the surrounding state area, it is clear that deeper gas is present which could become economically viable to drill into in the future, in as short a time as a generation or two.

-Those considering drilling platform locations, should evaluate likely future construction and pads should be built for the long term.

The difference here is that if future drilling locations can be considered at the time of permitting of current pipeline routes and drilling platforms, future drilling at platform locations

could be less expensive with no pad permits being needed or with minimal new permits needed at the platform locations, to connect with gathering and/or transport lines.

Brian Hill

Senior Program Officer

Richard King Mellon Foundation

Suite 4106, 500 Grant Street

Pittsburgh, PA 15219

412-392-2818

We thank Mr. Hill for sharing these important comments with RT Review readers.

- Gary Brown



EPA'S MULTI-YEAR ON REQUIREMENTS FOR CELLULOSIC BIOFUEL AND BIOMASS-BASED DIESEL

Refiners and ethanol groups continue to put forth legal attacks on the EPA Multi-Year fuel production targets for Cellulosic Biofuel and Biomass-based diesel. EPA uses the RFS program to force a shift from corn-based ethanol to cellulosic ethanol as the primary biofuel to meet certain end dates.

Essentially, Congress passed laws to meet environmental goals which interferes intentionally with energy markets, and its system simply did not work. EPA became the enforcer of

Congress' law, and the Agency has been placed in a situation where they have to justify a law and an approach that failed dismally. Unfortunately, industry believes that EPA has failed to act with professional judgment and be neutral, while implementing the law.

Legal arguments were filed on January 30th. To find a copy of the key issues, go to:

<https://rtenv.sharefile.com/ds58b27cff6044c23a>

CERCLA FINANCIAL ASSURANCE CLARIFICATION RELATED TO MINING

In December, the Pennsylvania Aggregates and Concrete Association provided information related to abandoned hardrock mines, and concern has been expressed that such mines could become Superfund Sites. Classes of hardrock mining involved include facilities which extract, beneficiate or process metals (e.g. copper, gold, iron, lead, magnesium, molybdenum, silver, uranium and zinc), as well as non-metallic, nonfuel minerals (e.g. asbestos, gypsum, phosphate rock and sulfur).

Some Congressional members have indicated opposition to this proposal, and financial responsibility requirements are included in the proposal. The pre-publication version of the proposed rulemaking was published on December 1, 2016. The National Sand and Gravel Association has indicated that the proposed rulemaking does not apply to mining of aggregates.

(Courtesy – PA Aggregates and Concrete Association)

FEDERAL REGULATORY UPDATES

EPA OFFICE OF PROGRAM EVALUATION CHECKING EPA'S VEHICLE EMISSIONS TESTING PROGRAM

The EPA Office of Inspector General is probing whether EPA does or does not have adequate internal controls in its program to monitor vehicle emissions. EPA audits automaker-supplied data, and has procedures for measuring new and used vehicle emissions for new and used vehicles in laboratories and real world conditions.

The probe is specifically focused on whether EPA's internal controls are effective at preventing light-medium-and heavy-duty on-road vehicle emissions fraud by vehicle manufacturers. The probe is expected to involve the Office of Transportation and Air Quality and EPA's Enforcement and Research Office.

EPA ISSUES GUIDANCE CLARIFYING KEY REMEDIAL INVESTIGATION/ FEASIBILITY STUDY AND RISK MANAGEMENT RECOMMENDATIONS AND CONTAMINATED SEDIMENT TECHNICAL ADVISORY GROUP OPERATING PROCEDURES

On January 9, 2017, EPA issued a Memorandum on a number of important issues related to sediments. The Memo covers topics such as how to use sediment toxicity testing, how to collect decision-oriented ecological effects, and related items such as how to consider and evaluate sediment issues to evaluate achievement of all remedial action objectives.

Other important topics in the Guidance include collecting baseline contaminant trend data in all appropriate media, and using monitoring data to evaluate remedial effectiveness. You can get a copy of the memorandum by going to:

<https://semsub.epa.gov/work/HQ/196834.pdf>

The Guidance applies to advising EPA Regions on work at Superfund Sites.

NEW ENGLAND STORMWATER GETTING LEGAL ATTENTION

Stormwater permitting has recently become more of an issue in New Hampshire and Rhode Island. The Conservation Law Foundation (CLF) is suing EPA for review of General Permits for stormwater discharges for small Municipal Separate Storm Sewer Systems. In Rhode Island however, the court rejected a CLF suit for a number of technical and legal reasons, some of which relate to TMDLs. In one instance, the court ruled that CLF cannot try to close gaps between the Rhode Island Department of Environmental Management in its assessment of impaired water bodies, and alleged EPA duties under the NPDES Program without evidence of discharges which contribute to violations of the water quality standard.

The pattern seems to be that judges will not go along with environmental groups using general litigation attempting to force tighter stormwater permits, absent actual proof that discharge violations are occurring in particular waters.

COMMENT PERIOD ON DEVELOPING AQUATIC LIFE CRITERIA FOR SPECIFIC CONDUCTIVITY IS EXTENDED BY PA

EPA has proposed to use specific conductivity as a water quality indicator particularly related to permitting of surface mines, which has been challenged. A question has arisen because a number of groups, including those mining and using mineral resources, have challenged the use of specific conductivity for regulatory purposes. Specific conductivity is not directly a "contaminant"; but is an "indicator parameter". Commenters have indicated that more time should be given due to the complexity of the issue, and because additional scientific data needs to be considered.

The new comment period extension ends on April 24th.

FEDERAL UPDATES

- TSCA "High Risk" Status of Chemical Review, pg. 7
- Aquatic Life Criteria Update, pg. 4
- Gold King Mine Spill, pg. 10

THE NATIONAL MINING ASSOCIATION REQUESTS COMMENT PERIOD EXTENSION RELATED TO FINANCIAL RESPONSIBILITY REQUIREMENTS

The National Mining Association has requested a 120-day mining extension, until July 10th, 2017, on the "Financial Responsibility Requirements under CERCLA Paragraph 108(b) for classes of facilities in the Hardrock Mining Industry." Cited as reasons for the extension are an impact on the 7.1 billion dollar industry to incur up to 171 million dollars per year in new Financial Assurance costs, according to EPA numbers.

Based on initial work by a number of mining companies, the industry believes that the number is far too low. Also cited as a reason is that the proposed rule is extraordinarily lengthy and complex.

BANKRUPT FIRM ALLOWED TO PURSUE CLAIM UNDER CERCLA

Asarco, a company with a long history of mining, smelting and refining, went bankrupt in 2005. It is assumed by many that bankruptcy usually ends CERCLA contribution claims. On January 3, 2017, a Circuit Court issued Summary Judgment on an appeal that allows a contribution action claim to continue against the Noranda Mining Inc. organization. For more information on this case click here: <https://www.ca10.uscourts.gov/opinions/16/16-4045.pdf>

COAL ASH LEAK LIABILITY

In a court case in Virginia, Dominion Virginia Power was sued by the Sierra Club for violations of the Clean Water Act. Under the Clean Water Act, the court has held that any entity discharging pollutants into surface waters must secure a permit, and it was found that Dominion did not have a permit

FEDERAL REGULATORY Updates (Continued)

to discharge arsenic. Dominion's consolidation of waste and conveyance of arsenic through groundwater to surface-water was found to form the primary basis of Sierra Club's Clean Water Act Claim.

Although the court found Dominion liable, there was no remedial plan that either side submitted, so the court included in its findings that Dominion is to monitor fish and crabs in the area for arsenic, Dominion will reopen its Solid Waste Permit Application, and the plan is to state the timing of Dominion's Application for a revised Solid Waste Permit. (Sierra Club, Plaintiff v. Virginia Electric and Power Company, dba Dominion Virginia Power, Defendant, Civil Action no. 2:15 - CV - 112).

More should be done in addition to issuing a plan to monitor the aquatic life in the Elizabeth River that had received a discharges of arsenic and likely other pollutants. Aquatic life in the river receiving this discharge should certainly be monitored but there is opportunity available in making an example of Dominion's discharges without permits. There need to be remedial Closure Plans in place to properly encapsulate the coal ash waste and prevent future discharges to the groundwater. And if capping in place does not appear to be a solution to this problem than consideration must be

given to sensibly move the waste into a lined and dry storage area away from waterways. Keeping waterways clean must be a priority.

- Julian Pozzi, Environmental Scientist

THE NATIONAL COTTON COUNCIL HAS COMMENTED ON A WIDELY USED HERBICIDE GLYPHOSATE

The National Cotton Council submitted a letter to EPA in late 2016, pointing out that Glyphosate (marketed as Roundup) is critical to managing weeds in cotton fields. Weeds can reduce cotton yields by an average of 30%, and the cotton industry has direct and indirect employment of 420,000 workers, and accounts for economic activity of greater than \$120 billion.

In addition to cotton fiber, cotton seed products are used for livestock feed, and cottonseed oil is used as an ingredient in food products as well as being a premium cooking oil. The National Cotton Council believes that cotton is especially sensitive to week competition, because it grows relatively slowly in early development stages, and does not reach full grown shade until eight or more weeks after germination. The Council also believes that since the commercialization of Glyphosate-tolerant cotton, growers have widely adopted agronomic practices of reduced tillage farming.

Soil conservation is believe to save approximately one billion tons of soil per year in the U.S., and 306 million gallons of tractor fuel and related emissions. The issue is considered of importance as EPA is evaluating Glyphosate's potential cancer risk.

PETROLEUM REFINERS PETITION EPA REGARDING 2016 RFS CELLULOSIC BIOFUEL MANDATES

The American Fuel and Petrochemical Manufacturers have petitioned EPA to reconsider a January denial of a petition for a waiver of the 2016 Renewable Fuel Standard Cellulosic Biofuel Standard. EPA denied the claim with further information in a number of Memoranda and additional data, but the fuel manufacturers are concerned that EPA used unrealistic projections for cellulosic biofuel production.

The manufacturers also believe that by not granting a waiver, overall RFS compliance will be costlier. Further, the manufacturers believe that obligated parties required to buy cellulosic waiver credits are essentially paying for a renewable fuel that does not exist and cannot be used by American consumers. The merchants believe that EPA's actions constitute unproductive economic behavior.



NEW SOURCE REVIEW PROGRAM – PREVENTION OF SIGNIFICANT DETERIORATION PERMIT EXEMPTIONS

For a number of years, there has been a litigious atmosphere as to whether Prevention of Significant Deterioration exemptions were allowable for “routine maintenance” at Power Plants. Specifically, a key issue was whether or not emissions that resulted from electric demand growth were beyond the power plant's control. EPA, in the cases of some power plants, accused the power plant with unlawfully evading Prevention of Significant Deterioration review, causing tougher pollution controls required by EPA, when it upgraded major boiler components. The Court has now issued a ruling on what “routine maintenance” does not require per-

mit review, and how the “demand growth” exclusion applies to power plants, when the question of needed tougher pollution control equipment need results purely from increased electricity demand.

The most recent case, in the U.S. District Court for the Eastern District of Missouri involved Ameren Missouri, and the court found that Ameren's Rush Island power plant projects moved forward without obtaining the required permits, without installing best-available pollution control technology, and without otherwise meeting applicable requirements.

PA UPDATES

PADEP MODIFIES TANK RULE

Late in 2016, DEP modified a rule regarding certain pipes in underground tank systems. Historically, there was a procedure called "Method 2", which is no longer allowed. The new requirement is: "Following any installation of new product piping, affected containment sumps must be tested for liquid tightness by hydrostatic testing, vacuum testing or another similar test method. The interstice of all new piping must be monitored at least monthly. All containment sumps used for interstitial monitoring must be liquid tight."

STAGE II VAPOR RECOVERY REQUIREMENTS RELATED TO GASOLINE DISPENSING EQUIPMENT IN THE PHILADELPHIA AND BEAVER VALLEY AREAS

In late 2016, PA's DEP changed Stage II Requirements for gasoline dispensers at service stations and elsewhere. Specific requirements are:

- On November 12, 2016, a notice was published in the Pennsylvania Bulletin which detailed the suspension of enforcement of Stage II requirements

for service stations that meet certain requirements when replacing or adding new dispensers. Owner/Operators must meet all the requirements listed in the notice in order to be covered by this suspension of enforcement.

- Details of these requirements are important when attempting to install new non-Stage II dispensers or replacing existing dispensers at a site that currently has a Stage II system. When this is done, the system and the associated vapor piping must be properly addressed.

- Another requirement for receiving suspension of enforcement is that owner/operators provide written notification to the appropriate region or agency prior to making any equipment changes.

- Copies of all records of the work done are to be kept on site with Stage II records including completed checklist and results of the required pressure decay testing (and tank tie testing, as appropriate) to document the work that was done.

- Dispenser removal and piping decommissioning are tank handling

PA UPDATES

- Tank Rules Modified, pg. 6
- Stage II Vapor Recovery - Philadelphia and Pittsburgh, pg. 6

activities that require a DEP certified installer, and also requires, "2630-FM-BECB0575 Underground Storage Tank Modification Reports" to be submitted to the Storage Tanks Program at the appropriate regional office and at the central office of the DEP, within 30 days of the completion of the work.

The compliance date for both rules was January 1, 2017. Changes relate to more stringent New Source Performance Standards and the new rule supersedes the requirements of a previous reasonably available Control Technology Permit. Recordkeeping, monitoring and work practice requirements are part of the new rulemaking and recordkeeping is required.

Over the years, RT has assisted its clients with all aspects of the evolving Storage Tank Regulations. Please contact us for your tank system update and closure needs; Craig Herr, PG, (610-265-1510 ext. 215 and cherr@rtenv.com.

KAYAK TOUR ON BIG TIMBER CREEK GROUP TAKES STOCK OF HEALTH OF WATERWAYS

Here on the dark, wooded banks of Big Timber Creek in Blackwood, the usual hum and hustle of Philadelphia's inner-ring suburbs seemed miles away Friday morning -- even with all those cars rushing by on the Route 42 overpass.

But it is precisely the proximity of this gritty freeway to a surprisingly scenic river that had brought 21 kayakers from far-flung places here to crowded Camden County for the start of a three-day celebration of Earth Day.

The voyage was planned to take them from Blackwood south to Old Pine Farm in Deptford and then northwest to the Delaware River, where they were to inspect the health of its mussel population, then up to Penn's Landing, where they were to spend the night on the retired battleship Olympia.

They paddled from Penn's Landing to a sanitary landfill on Pennsauken Creek and back, and then back to the Cooper River, entering by way of Petty's Island in Pennsauken.

Big Timber Creek's surprisingly scenic course through dense suburban sprawl is just one reason they chose it for the start of the journey.

For decades, 13 sewage treatment plants poured 15 million gallons of effluent every day into Big Timber Creek, Baugh said, and an additional 38 treatment plants in Camden County were polluting other rivers.

Thanks in part to the Clean Water Act of 1972 and other federal

efforts, Camden County closed its municipal treatment plants in the 1980s and '90s, and it now sends all sewage to a single treatment plant in Camden that he described as "state of the art."

Milling around Baugh at Big Timber Creek Marina, chatting with one another or crouching over their yellow, two-person, 22-foot "expedition" kayaks, were an engineer, an oceanographer, a boat builder, a "green architect," the president of a New York-based philanthropic foundation, two employees of the William Penn Foundation, several members of the Upstream Alliance, the president of Philadelphia's Independence Seaport Museum, and Brian DuVall, CEO of the Center for Aquatic Sciences at the Adventure Aquarium in Camden.

Shortly before 11 a.m., the paddlers posed for a group photo and then started launching their kayaks from a floating dock. Once launched, eight kayaks rafted up for another group photo and gradually started slipping down the river.

About four p.m. the group landed at a spit of sand near the mouth of the Big Timber at the Delaware. There they found the shells of five mussel species, including two -- the eastern pondmussel and the tidewater mucket -- that are considered threatened.

"It's a good sign," said Genevieve Leet, special projects director for Upstream Alliance. "It's more than we expected."

(by David O'Reilly, Philadelphia Inquirer 4-23-17)

NJ UPDATES

PERFLUORINATED CHEMICALS (PFC) IN NEW JERSEY

To clarify an editing error, in the January 2017 RT Review, the New Jersey Department of Environmental Protection (NJDEP) does have the authority to require or enforce the remediation of perfluorinated chemical (PFCs) . . . comments by Ken Kloo of NJDEP at an audience of state and federal regulators were that “those states without the same statutory and regulatory construct as New Jersey, or that rely on the federal programs, may find their authority lacking.”

INDUSTRIAL SITE RECOVERY ACT REQUIREMENTS CHALLENGED; COURT RULES THAT DEP RULES STILL APPLY

17-2-2150 *Drytech, Inc. v. State*, N.J. Super. App; Div. (per curiam) (12 pp.) A company appealed seeking a declaration that it did not have to comply with the site remediation obligations imposed by the Site Remediation Reform Act. The company manufactured desiccants and conceded that its industrial operations were subject to the Industrial Site Recovery Act. The company triggered ISRA's remediation requirements in 1998, 2001 and in 2002, notified the

DEP, remediated the property and the DEP issued NFAs and covenants not to sue.

The company triggered ISRA again in 2013 after the SRRA was enacted. The company requested a "waiver" of the requirement that it retain an LSRP to investigate AOCs at the site and issue an RAO on the grounds that it had previously complied with the ISRA in connection with the three NFAs the DEP issued for the site. The company sought declaratory judgment and the trial judge dismissed the company's complaint because it failed to state a claim upon which relief could be granted.

The court agreed with the trial judge that SSRA was a new law which imposed new obligations and nothing in the law allowed a waiver to a regulated entity based upon its prior compliance with ISRA. DEP's issuance of prior NFAs and covenants not to sue did not excuse plaintiff's obligations to comply with any future laws or regulations.

Courtesy, Mitchell Kizner, Esquire
Mitchell.Kizner@flastergreenberg.com

NEW JERSEY ISSUES STORMWATER CONSTRUCTION GENERAL PERMIT FIVE-YEAR RENEWAL

On March 1, 2017, the Stormwater

NJ UPDATES

- ISRA Requirements Challenged, pg. 7
- Stormwater Construction Permit, pg. 7

Construction General Permit that covers construction sites in New Jersey was reauthorized for a five-year term and updated requirements became effective. There are changes affecting construction sites including updated Stormwater Pollution Prevention Plan Requirements. The changes include public posting of construction general permit coverage, requirements for waste containers and keeping dumpster lids closed, and there are specific requirements related to demolition activities, including PCBs in lighting fixtures, caulk, specialty paints, and adhesives.

There are also requirements related to fireproofing activities and some related to ceiling tiles and acoustic boards. It is important that those contracting for demolition activities anywhere in New Jersey be aware of these new requirements. Finally, there are certain external building wash-down water requirements, related to potential PCBs in paint, that also need to be followed. More information on the Permit can be found at www.nj.gov/dep/dwq/5g3.htm.

GAO REPORTS ON TSCA “HIGH RISK” STATUS OF CHEMICAL REVIEWS

The Government Accountability Office on February 15th indicated that revisions to the Toxic Substance Control Act are helpful in reducing concerns that EPA's Chemical Review Program produced inadequate information. GAO keeps a list of programs which are of concern, from the perspective of being a high risk program for having potential fraud, waste or abuse.

The GAO believes that the upgraded TSCA law finalized last June makes the program better and potentially will help to remove the TSCA Chemical Review Program from being a high risk category program in the future. For a copy of the February 15th Report, go to:

<http://www.gao.gov/assets/690/682765.pdf>

**Our 24-Hour Urgent Line Service
(800) 725-0593**

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

FEDERAL BROWNFIELDS AND AIR LAW REFORM

A hearing was held on February 16th by the House Energy and Commerce Environmental Subcommittee, focused on Brownfields reauthorization legislation. Testimony was received by the National Association of Manufacturers, U.S. Chamber of Commerce, the Pennsylvania Chamber of Business and Industry, and others.

Presenting testimony for the Pennsylvania Chamber of Business and Industry was Kevin Sunday of the Chamber, Director of Environmental Affairs.

His key testimony issues presented were:

- The Current Regulatory Construct Presents Substantial Challenges to Industry and Is Reducing Economic Opportunity
- Despite Nationwide Progress with Air Quality, the Cost of Compliance Continues to Mount
- The Consequences of Non-Attainment and Ozone Transport are Significant and Job Loss is of Concern
- Recent Regulatory Changes Are Disruptive to Business Planning
- The Need for Reform in the Offsets and Permitting Programs is Very Real
- Thoughtful Policy is Needed to Support Additional Infrastructure and Energy Development
- Recommendations to Modernize Our Regulatory Approach
- EPA should make administrative changes Non-Attainment New Source Review (NNSR) provisions and its modeling guidance to reflect expected emissions from actual operations, rather than from a potential-to-emit basis.²³ Similarly, the PSD program discourages cost-saving and emissions-reducing improvements at facilities and needs to be reformed, and the HAPS “once in, always in” policy should be retracted. The Clean Air Act can be amended to accommodate these reforms.
- EPA should alter its permitting policy to provide certainty that projects that

must undergo BACT or LAER determinations by determining appropriate emissions controls based upon the emissions control technology that was available during the initial permit application at projects in the same industrial category and that were actually constructed at the time; current agency policy requiring projects to undergo a revolving door of appeals prevents some projects from ever being built.

- To amend the Clean Air Act to promote development in non-attainment areas, streamline EPA approvals or review of proposed state/local permitting actions and provide certainty to final permitting actions.
- Congress should “speak clearly” with respect to ambiguities of the Clean Air Act.
- The Clean Air Act should be amended to encourage “performance-based approaches” that rewards states and industry for attaining air quality goals.
- The Clean Air Act should be amended to allow for a more thoughtful implementation and review timeframe for all NAAQS pollutants, not just ozone. In addition, to the extent modeling is used in attainment designations, EPA should adopt an air quality modeling approach that reflects actual and expected future source operations.
- Congress should establish clearly in statute how costs and benefits of regulation are to be calculated.
- EPA should also be required to convene panels with small businesses for all major rules, including any changes to NAAQS, as outlined in the Small Business Regulatory Enforcement Fairness Act of 1996. These panels would bring to the table the voices of small businesses, many of whom have less flexibility than larger operations to adjust business practices in order to comply with new requirements. These panels were not convened for NAAQS or the Clean Power Plan, despite significant impacts from these rules on small

businesses.

Mr. Sunday stated that it should be clear that significant opportunities lay before us to grow our economy and secure continued environmental progress. There are unquestionably reforms needed to both the actual text and the implementation of several environmental statutes, starting with the Clean Air Act. We have suggested a few reforms for Congress and the Trump administration to consider. We also note that these reforms are not panacea: such reform must take place along with competitive tax, trade and labor policy. We must also work to ensure a skilled and able workforce is continually being developed so that as new opportunities become available as a result of more thoughtful policy, the promise of a stronger, more productive economy becomes a reality.

The Chamber’s comments focused on the Clean Air Act, are on point and there is a debate in Congress as to whether there should be a Brownfields Law push, or overhauling the nation’s key air laws should get priority.

We at RT, our observation is that environmental laws, regulations and programs are all too often lead to underfunded, inappropriately staffed, and all too often, laws and regulations wind up being challenged in court.

We think that the United States has a cleaner environment than nearly all other developed countries, and given the decades of environmental progress, getting the laws and regulations right and having programs which are properly funded, organized and staffed is more important than rushing environmental laws through, based on lobbying and unsound environmental science and proper consideration of what it will take to run key programs over the next decades. Getting it right is more important than rushing into programs we don’t have the funds and staff for.

- Gary Brown

ASBESTOS CEMENT PIPE ENCAPSULATION

There is a new process in encapsulating damaged asbestos containing underground cement piping. This is a game changing process utilizing a proprietary product that will revolutionize the way we rehabilitate existing asbestos cement pipe. There are estimates of over 630,000 miles of asbestos cement pipe within the United States and the last remnants of asbestos cement pipe were installed in the late 1970's. Complicated regulations laws surrounding the handling of asbestos cement pipe precludes many municipalities and owners from positively rehabilitating their existing asbestos cement pipe systems.

This new equipment, process and techniques for rehabilitating old underground pipelines, particularly asbestos pipelines, in which an old underground pipeline is replaced, as by drawing a bursting head through the old pipe to burst it and simultaneously pulling a new pipe through behind the bursting head. The invention has particular applicability to the rehabilitation of old asbestos pipelines in which the burst up debris must be contained or encapsulated in some manner. The macro-encapsulation materials form an in-situ

layer of a temporarily fluid macro-encapsulating material which absorbs and immobilizes asbestos fibers and pipe fragments, the macro-encapsulating material is applied simultaneously as the pipe bursting operation proceeds.

This process utilizing a product provides substantial assurance that the existing asbestos cement pipeline can be positively rehabilitated with a replacement pipeline with a 100+ year service life. Even the most conservative concerns over asbestos cement pipe fragments remaining in the ground after pipe rehabilitation activities are alleviated by the provision of a proprietary encapsulation fluid that entombs the remaining asbestos cement pipe fragment in a highly blue visible colored "dig-able" conglomeration. This encapsulation process meets and exceeds all existing regulations when rehabilitating asbestos cement pipe when using the trenchless technology pipe bursting.

For more information on this new encapsulation process, please call Tony Alessandrini at 856.467.2267, ext 110.

DELAWARE PETITIONS EPA REGARDING PENNSYLVANIA GENERATING STATION EMISSIONS

In late 2016, the State of Delaware petitioned EPA regarding generating station emissions from a plant in Indiana County, PA. Of issue is the Cross-State Air Pollution Rule related to ozone emissions. Delaware believes that efforts are underway to address transported emissions, but Delaware believes that the efforts are not adequate to mitigate the impacts of upwind emissions on Delaware's air quality.

Delaware believes that EPA has effectively "closed the door" to

Clean Air Act tools designed to bring clean air into Delaware by establishing non-attainment area boundaries that effectively penalize an area like Delaware rather than apply the Clean Air Act to emissions that cause the unhealthy air.

Delaware believes that more than 94% of the ozone levels in Delaware are created by the transport of air pollutants from upwind areas.

ENVIRONMENTAL SURVEYS

Phase I & II Environmental Site Assessments

- Field Investigations
- Computer Regulatory Database Checking
- Field Analytical Testing (Volatiles, Metals, PCB's, Gasoline, and Oil Compounds)
- Remedial Action Plans
- Asbestos Testing & Abatement
- Lead-Based Paint Testing & Abatement
- Feasibility Studies
- Storm Water Management

BROWNFIELDS/LAND RECYCLING:

- Reuse Plans
- PCB Remediation
- Risk Assessment
- Capping/Paving
- Bioremediation
- Natural Attenuation

OIL & GAS SERVICE:

- Drill Pad Inspections
- Spill Prevention Control and Counter Measure Plans
- Release Response Act 2 Cleanups
- Permits
- Erosion and Sediment Control Plan

SCOPE OF SERVICES

INDOOR AIR QUALITY:

- Baseline Assessments
- Mold Investigations
- IAQ Management Programs
- Mold Remediation

REMEDIATION:

- Groundwater Recovery/Treatment
- Waste/Soil Excavation
- Vapor Extraction
- Bioremediation
- Liquid and Vapor Phase Carbon Treatment
- Thermal Oxidation
- Thermal Desorption
- Tank Removals/Lagoon Closures

LANDFILLS:

- Design & Permitting
- Gas Recovery Systems
- Truck Wash Facilities
- Leachate Collection/Treatment
- Cap, Cover and Slurry Walls

OTHER SERVICES:

- Training Programs
- Contingency Plans
- Source Reduction

- Waste Minimization
- Soil Testing
- Geotechnical Engineering
- Superfund Project Management
- Expert Witness Testimony

AIR EMISSIONS:

- Emissions Permitting and Inventories
- Emissions Testing
- Odor Control Studies
- Dispersion Modelling

PROCESSING FACILITIES:

- Transfer Stations
- Recycling Facilities
- Industrial Metal Processing
- Residual Waste Planning Compliance

CONCEPT THROUGH START-UP:

- Design and Project Management
- Permitting
- Construction and Construction QA/QC
- Start-up Operations Services
- Operations and Maintenance



GOLD KING MINE SPILL STILL A VERY HOT TOPIC

Senator John McCain is pushing EPA’s Inspector General to provide information on why EPA has not yet responded on potential criminal misconduct or administrative misconduct related to the 2015 Gold King mine spill. It is being questioned as to why the Department of Justice has declined to take action on the Office of Inspector General’s findings, and why the EPA has not responded.

American citizens, watching the evening news when the spill occurred, could plainly see that EPA and its contractors used equipment to open a mine which caused a spill. Doing this seemed needless.

What happened:

- The Gold King Mine disaster resulted in three million gallons of wastewater containing toxic materials, such as lead and arsenic, pouring into the Animas River. The effects of the spill spread to the states of Colorado, New Mexico, and Utah. Damage from the spill also affected the Navajo Nation and Southern Ute Indian Tribe. Estimates have indicated that the cost of the spill could total as much as \$27.7 billion. This is a serious incident and it deserves a serious response from the U.S. Department of Justice.

- The Department of Justice, including the U.S.

Attorney's Office for the District of Colorado, has aggressively pursued the discharge of pollutants in other non-EPA incidents into the nation's waters in violation of the Clean Water Act. In 2013, the U.S. Attorney for this District, in bringing a case investigated by EPA's Criminal Investigation Division, prosecuted a Longmont, Colorado, business owner for illegally discharging 1,000 gallons of sewage into a ditch connected to a local reservoir. Both the individual and his company were each fined \$10,000 for the violation. Then-U.S. Attorney John Walsh stated "The defendant in this case now knows there are criminal penalties for his conduct." EPA's head of criminal enforcement in Colorado went on to say "This case shows that those who try to save a buck by cutting corners will be vigorously prosecuted."

Congress is obviously questioning why the government itself uses a double standard – one when it is a regulator and a standard that is not apparently taken that seriously, when EPA has caused a spill.

We at RT think the same laws should apply equally to everyone, whether they work for the private sector, or are in government.

- Gary R. Brown

PENNSYLVANIA BULLETIN NOTICES

11/19/17 – The Department of Environmental Protection published notice of final technical guidance on Land Recycling Program Vapor Intrusion Into Buildings From Groundwater and Soil under Act 2 in the November 19 PA Bulletin. (DEP ID: 261-0300-101)

11/19/16 – The Public Utility Commission published notice in the November 19 PA Bulletin of the final Order implementing the Alternative Energy Portfolio Standards related to net metering and other purposes

11/19/16 – The Fish and Boat Commission published notice in the November 19 PA Bulletin of proposed additions, revisions and removals from the list of Wild Trout Streams and the list of Class A Wild Trout Waters for public comment. Comments were due December 19, 2016.

1/21/17 – New DEP Rules for Chapter 105 Environmental Assessments for Pipeline, Multi-County Projects – The Department of Environmental Protection published notice in the January 21 PA Bulletin inviting comments on a new interim final guidance telling applications for large, multi-county projects, like pipelines or highways, how to do environmental assessments required under Chapter 105 Water Obstruction and Encroachment Permits.

2/6/17 – EPA Lacks Resources to Enforce Minimum Federal Safe Drinking Water Regs – The US Environmental Protection Agency notified DEP’s Safe Drinking Water Program in December that its lack of resources to enforce minimum federal requirements could be grounds for taking primacy away from Pennsylvania

2/6/17 – DEP Proposes Changes to Tank Closure, E.Coli Laboratory Reporting Guidance – The Department of Environmental Protection published notice in the February 4 PA Bulletin of proposed changes to the technical guidance clarifying closure requirements for aboveground and underground storage tanks and for Cryptosporidia, E.coli and turbidity laboratory reporting requirements for public water systems. Comments were due in March.

2/6/17 – Technical Guidance Finalized for Rapid Assessments of Wetlands, Riverine Conditions – The Department of Environmental Protection published notice in the February 4 PA Bulletin of final technical guidance on wetland condition Level 2, riverine condition level 2 and lacustrine condition level 2 rapid assessments.

4/15/17 – DEP published notice of a proposed “mass certification” of nutrient credits from wastewater treatment plants in the Chesapeake Bay watershed under the Nutrient Credit Trading Program.

FEDERAL REGISTER NOTICES

<http://www.federalregister.gov>

Proposed Rule EPA – Limited Federal Implementation Plan; Prevention of Significant Deterioration Requirements for Fine Particulate Matter PM2.5	(Federal Register – 12-22-17)
Rule EPA – National Oil and Hazardous Substances Pollution Contingency Plan; National Priorities List: Partial Deletion of the North Penn Area 6 Superfund Site	(Federal Register – 12-23-17)
Proposed Rule EPA – National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works	(Federal Register – 12-27-17)
Proposed Rule EPA – National Emission Standards for Hazardous Air Pollutants: National Yeast Manufacturing Risk and Technology Review	(Federal Register – 12-28-17)
Proposed Rule EPA – National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semicemical Pulp Mills	(Federal Register – 12-30-17)
Notice EPA – Paraquat Dichloride Human Health Mitigation Decision; Notice of Availability	(Federal Register – 1-3-17)
Proposed Rule EPA – Addition of Natural Gas Processing Facilities to the Toxics Release Inventory (TRI)	(Federal Register – 1-6-17)
Rule EPA – Addition of a Subsurface Intrusion Component to the Hazard Ranking System	(Federal Register – 1-9-17)
Rule EPA – Protection of Visibility: Amendments to Requirements for State Plans	(Federal Register – 1-10-17)
Proposed Rule EPA – National Primary Drinking Water Regulations; Announcement of the Results of EPA's Review of Existing Drinking Water Standards and Request for Public Comment and/or Information on Related Issues	(Federal Register – 1-11-17)
Proposed Rule EPA – Financial Responsibility Requirements for Facilities in the Chemical, Petroleum and Electric Power Industries	(Federal Register – 1-11-17)
Proposed Rule EPA – Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry	(Federal Register – 1-11-17)
Proposed Rule EPA – TSCA Inventory Notification (Active-Inactive) Requirements	(Federal Register – 1-13-17)
Notice EPA – Agency Information Collection Activities; Proposed Collection; Comment Request; Information Collection for Importation of On-Highway Vehicles and Motorcycles and Nonroad Engines, Vehicles, and Equipment	(Federal Register – 1-13-17)
Proposed Rule EPA – Public Notification Requirements for Combined Sewer Overflows to the Great Lakes Basin	(Federal Register – 1-13-17)
Proposed Rule EPA – Procedures for Prioritization of Chemicals for Risk Evaluation Under the Toxic Substances Control Act	(Federal Register – 1-17-17)
Notice EPA - Final National Pollutant Discharge Elimination System (NPDES General Permit for Stormwater Discharges From Construction Activities	(Federal Register – 1-19-17)
Rule Homeland Security and Others – Federal Policy for the Protection of Human Subjects	(Federal Register – 1-19-17)
Proposed Rule EPA – Trichloroethylene (TCE): Regulation of Use in Vapor Degreasing Under TSCA Section 6(a)	(Federal Register – 1-19-17)
Proposed Rule EPA – The U.S. Environmental Protection Agency (EPA) is proposing new Health and environmental protection standards under the Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978.	(Federal Register – 1-19-17)
Proposed Rule EPA – Procedures for Chemical Risk Evaluation Under the Amended Toxic Substances Control Act	(Federal Register – 1-19-17)
Notice EPA – Revision to the PAG Manual: Protective Action Guide (PAG) for Drinking Water after a Radiological Incident	(Federal Register – 1/19/17)
Proposed Rule EPA – Fluoride Chemicals in Drinking Water; TSCA Section 21 Petition	(Federal Register – 2-27-17)
Notice EPA – Request for Public Comments on Peer Review Candidates for Proposed Modeling Approaches for a Health-Based Benchmark for Lead in Drinking Water	(Federal Register – 3-20-17)
Rule EPA – Limited Federal Implementation Plan; Prevention of Significant Deterioration Requirements for Fine Particulate Matter PM2.5	(Federal Register – 3-22-17)
Rule EPA – Mercury and Air Toxics Standards (MATS) Electronic Reporting Requirements	(Federal Register – 4-6-17)



KEY HIGHLIGHTS

TECHNOLOGY UPDATES

- Arctic Sea-Ice Levels Hit a Record Low, pg. 3
- Asbestos Cement Pipe Encapsulation, pg. 9

RT ENERGY NEWS

- Natural Gas Industry Trends, pg. 3

FEDERAL UPDATES

- TSCA “High Risk” Status of Chemical Review, pg. 7
- Aquatic Life Criteria Update, pg. 4
- Gold King Mine Spill, pg. 10

PA UPDATES

- Tank Rules Modified, pg. 6
- Stage II Vapor Recovery - Philadelphia and Pittsburgh, pg. 6

NJ UPDATES

- ISRA Requirements Challenged, pg. 7
- Stormwater Construction Permit, pg. 7
- Perfluorinated Chemicals - a Clarification, pg. 7

RT E-MAIL DIRECTORY

TONY ALESSANDRINI	TALESSANDRINI@RTENV.COM	WALTER HUNGARTER	WHUNGARTER@RTENV.COM
BENJAMIN BAILEY	BBAILEY@RTENV.COM	VICTORIA JONES LONG	VLONG@RTENV.COM
LARRY BILY	LBILY@RTENV.COM	JUSTIN LAUTERBACH	JLAUTERBACH@RTENV.COM
JENNIFER BERG	JBERG@RTENV.COM	JOHN LYDZINSKI	JLYDZINSKI@RTENV.COM
CHRISTOPHER BLOSENSKI	CBLOSENSKI@RTENV.COM	CHRISTINE MILLER	CMILLER@RTENV.COM
ADAM BRINKMAN	ABRINKMAN@RTENV.COM	BREANNA MORRIS	BMORRIS@RTENV.COM
GARY BROWN	GBROWN@RTENV.COM	SEJAL PATEL	SPATEL@RTENV.COM
LORELEI CARR	LCARR@RTENV.COM	JULIAN POZZI	JPOZZI@RTENV.COM
CHRISTINE CONFER	CCONFER@RTENV.COM	MARIA SCUDDER	MSCUDDER@RTENV.COM
CECILIA DADARIO	CDADARIO@RTENV.COM	JAMES SIERACKI	JSIERACKI@RTENV.COM
CRAIG HERR	CHERR@RTENV.COM	CHRIS WARD	CWARD@RTENV.COM

VISIT OUR WEBSITE
WWW. RTENV.COM



MONTGOMERY COUNTY - ANOTHER BROWNFIELDS REDEVELOPMENT
 Page 1

EPA AND CORPS POST NOTICE - RESCIND OR REVISE CLEAN WATER RULE
 Page 1

NATURAL GAS INDUSTRY TRENDS
 Page 3

NSR/PSD PROGRAM EXEMPTIONS
 Page 5

MINING FINANCIAL RESPONSIBILITY REQUIREMENTS
 Pages 4, 7

FEDERAL BROWNFIELDS AND AIR LAW REFORM
 Page 8